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Shocking Revelations at Hydro-Quebec: The Environmental and Legal Consequences of the Quebec-New York Power Line

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I. Introduction

In 1973, the average American realized the implications of rising tensions in the Middle East.[1] The citizens of the United States were reduced to purchasing gasoline for their automobiles on either odd- or even-numbered days; waiting in block-long lines to obtain gasoline for their vehicles; and paying significantly higher prices for petroleum products.[2] Thus, with the advent of the 1972 oil crisis, the eyes of the world focused upon the Middle East, and the common citizen began to comprehend the magnitude of the importance of the globe's oil lifeline—the Persian Gulf. Accordingly, the nations of the world searched to find nearer and more reliable sources of energy.[3]

Although hydroelectricity[4] has been in use for several decades,[5] its full potential as a legitimate energy source had never been realized.[6] Not surprisingly, the old hydroelectric plants in the developed countries were examined with a renewed interest during the oil crisis.[7] Hydroelectricity seemed to be the source of power that the nations of the world had looked for, found, and prematurely disregarded.[8] In the developing world, as well, extensive outlays for hydro

1. *See*, Cliffe, *Hydro Past or Future?*, 89 TECH. REV., Aug./Sept. 1986 at 15 [hereinafter Cliffe, *Hydro*].

2. Van Gelder, *State Begins Regulating Sale of Gasoline Today*, N.Y. Times, Feb. 26, 1974, at A1, col. 2; Rosenbaum, *Crisis in Energy is Over for Nation*, N.Y. Times, Feb. 25, 1974 at A1, col. 4.

3. Cliffe, *Hydro, supra* note 1, at 16.

4. Simply described, hydroelectricity and hydroelectric power are created via the wholesale transfer of energy harnessed from the water's potential force. Hydroelectric power has been deemed the most widely used renewable energy resource in the world. *Hydroelectric*, ALTERNATIVE SOURCES OF ENERGY, Dec. 1987 at 53 [hereinafter ASE]. From 1979 through 1986 the use of hydroelectric power has resurged and now constitutes thirteen percent of the United States' electric generating capacity. *Id.*

5. *Id.; see*, Cliff, *Hydro, supra* note 1, at 15.

6. *See generally*, Osterland, *Meeting US electricity demand in the 90's*, Christian Sci. Monitor, July 25, 1985, at 7, col. 1; *see* Cliffe, *Hydro, supra* note 1, at 15.

7. Telephone interview with source affiliated with Hydro-Quebec (Oct. 6, 1987) [hereinafter Hydro-Quebec interview].

8. *See, e.g.*, Cliffe, *Hydro, supra* note 1, at 18. Hydropower has been deemed "clean, safe, renewable and reliable," and the developed nations of the world have lauded its benefits for years; yet the developed nations had failed to use hydroelectric energy to grand scale that was readily possible prior to 1972. Many of the existing hydroelectric facilities are more than

development granted by the World Bank and other financial institutions were committed to bringing the Third World into self-sufficiency in the energy-producing field.[9] Unfortunately, the rush to exploit hydroelectric power was instituted absent significant evaluation of the long-term consequences of its use.[10]

It was once assumed that hydroelectric power was harmless,[11] but new evidence has been presented by the New York State Powerline Project Scientific Advisory Panel that may change the way the world perceives "safe" electrical power.[12] With alarming recognition, hydroelectric power does have a substantial effect on the natural environment as well as the human environment.[13] This Comment explores the motives and needs of Hydro-Quebec and the New York Power Authority, parties which have agreed to build an electrical power line extending from St. James Bay, Quebec, Canada, to New York City.[14] In addition, this Comment assesses selected environmental concerns through the world which relate to the Hydro-Quebec case in conjunction with disputes settled by international law.[15] The adverse environmental effects, both upon humans and the natural ecosphere are then analyzed.[16] This Comment also examines relevant international law and policy which embraces the environmental concerns[17] and, subsequently, recommends changes.[18] This Comment concludes that the effects of the Hydro-Quebec electrical line should have been analyzed more carefully and with heightened respect for international environmental law.[19]

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50 years old. ASE, *supra* note 4, at 53. As a result of their age, the power plants need a great deal of upgrading to meet demands. *Id.* The "great equalizer" was the oil crisis which, if sustained over a long period of time, would lend support to the capital outlays necessary to renovate old hydroelectric plants and to begin work on new structures.

9. *See generally* Flavin, *Electricity in the Developing World*, 29 ENV'T, Apr. 1987, at 12. In fact, between the years 1980 and 1990, the hydroelectrical capacity of the Third World will almost double, rising from 141,000 megawatts to 218,000 megawatts. *Id.* at 15 [hereinafter Flavin].

10. Rheem, *Environmental Action: A Movement Comes of Age*, Christian Sci. Monitor, Jan. 15, 1987, at 18, col. 1 [hereinafter Rheem]; *see infra* notes 95-122 and accompanying text (discussing the environmental effects of hydroelectric power, in particular, the Hydro-Quebec lines from St. James Bay to New York City).

11. Cliffe, *Hydro, supra* note 1, at 18.

12. *See generally* NEW YORK STATE POWERLINES PROJECT SCIENTIFIC ADVISORY PANEL, FINAL REPORT, BIOLOGICAL EFFECTS OF POWER LINE FIELDS (1987) [hereinafter BIOLOGICAL EFFECTS].

13. *See generally id.*; *see also*, Cliffe, *Hydro, supra* note 1, at 16.

14. *See infra* notes 21-48 and accompanying text (discussing the background information surrounding the Quebec-New York agreement).

15. *See infra* notes 52-88 and accompanying text (discussing international dilemmas spanning *Corfu* to *Houston*).

16. *See infra* notes 96-123 and accompanying text (discussion the impact of the Hydro-Quebec Line on nature and man).

17. *See infra* notes 124-163 and accompanying text (discussing both U.N. resolutions, multinational agreements, and bilateral treaties).

18. *See infra* notes 166-181 and accompanying text (discussing possible methods of eliminating "ex post facto" decision-making in the environmental law realm).

19. *See infra* notes 182-184 and accompanying text (discussing the solutions to the

II. The Agreement

By 1996, New York City will have more electricity supplied to its offices, residences, and stores than ever before;[20] a substantial portion will be provided by a hydroelectric dam at St. James Bay, Quebec.[21] After lengthy negotiations, Hydro-Quebec agreed with the New York Power Authority in 1982 to initiate work on constructing the world's longest electrical line.[22] In addition to examining several factors and the respective motivations of each of the signatories to that agreement; it is important to note the viewpoints of two of the more visible promoters of the Hydro-Quebec contract—Hydro-Quebec's president, Guy Coulombe and Canadian Premier, Robert Bourassa.

A. The Companies

1. Hydro-Quebec.—Essentially, Hydro-Quebec plays the role of exporter in this contract. Hydro-Quebec officials recognized the importance of innovation in the energy field in the 1950s[23] and, accordingly, constructed its first large scale hydroelectric dam in the Bersimis River.[24] Subsequent to regional success in hydropower, Hydro-Quebec looked to the tremendous potential of the La Grande River as an energy generating resource.[25] In 1972, work commenced on the dam under the guise of The Société d'énergie de La Baie James (SEBJ), in an effort to reduce the impact of the rising costs of oil imports.[26] Leadership at Hydro-Quebec recognized the need in the American market for less expensive sources of energy and, therefore, began to export this resource to the New England States in grand fashion.[27] Finally, in 1980, preliminary negotiations between the New York Power Authority (NYPA) and Hydro-Quebec were

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Hydro-Quebec quagmire).

20. The contract between Hydro-Quebec and the New York Power Authority stipulates that in 1995, New York will receive 500 megawatts of electricity, and in 1996 an additional 500 megawatts will be supplied. Telephone interview with inside source, New York Power Authority (May 27, 1988) [hereinafter NYPA Source]. As of May 27, 1988, both parties have agreed upon a January 6, 1988 letter of intent. *Id.*

21. The actual ribbon-cutting ceremony of the Marcy South line for the low scale electrification of the line was in June, 1988. *See* NYPA Source, *supra* note 20. The Marcy South line conveys energy from Utica, New York to New York City. *Id. See also* Power Authority of the State of New York, Opinion No. 85-2, case 70126 (Issued: Jan. 30, 1985) at 8, 11.

22. *See generally id.* at 1. The cable is designed to span 340 miles in New York and an additional 675 miles in Quebec. *See* NYPA Source, *supra* note 20. The construction on the line began in the mid-1970's in Canada and in the mid-1980's in New York. *Id.*

23. HYDRO-QUEBEC, JAMES BAY: TAMING THE LA GRANDE RIVER 4 (1985) [hereinafter HYDRO-QUEBEC, TAMING].

24. *Id.* The dam is known as the Manic Outardes Complex. *Id.*

25. *Id.* at 16. The drainage basin alone at LaGrande is 97,400 km²—more than twice the size of Switzerland. *Id.*

26. *Id.* at 47; *see supra* note 7.

27. *See* Terry, *Will Quebec's Hydroelectric Bubble Burst?*, BUS. WK., May 5, 1986, at 44 [hereinafter Terry].

initiated in an effort to provide harnessed hydroelectric power to southeastern New York State.[28]

Although Hydro-Quebec's construction of the La Grande Complex was not expressly for compliance with the arrangement between NYPA and itself, the environmental consequences of the undertaking of this project are still highly relevant to the international aspects of this issue.[29] Prior to the ground breaking for the revamped dam, Hydro-Quebec recognized that the territory was fragile and that it would be difficult to maintain an adequate ecological balance in conjunction with the construction and implementation plans for the La Grande Complex.[30] Hydro-Quebec boasts that it met this challenge,[31] but statistics support a contrary view.[32] To survey in brief, for example, Hydro-Quebec drowned approximately ten million trees in filling a reservoir;[33] excavated 262,400,000 cubic meters of material and fill;[34] rerouted rivers;[35] built five airports; erected 215 dikes; laid hundreds of kilometers of roads for preconstruction;[36] and redeveloped lands surrounding the James Bay area—lands formally occupied by the Cree and Inuit Indians.[37] Finally, Hydro-Quebec has characterized its present activities with respect to the environment as "corrective."[38] Indeed, this foreshadows Hydro-Quebec's perception of its responsibilities, or lack thereof, in the international environmental realm.

2. The New York Power Authority.—Regarding international duty owed to other nations, Hydro-Quebec is not the only suspect party to this environmentally damaging pact. The NYPA, although

28. Hydro-Quebec interview, *supra* note 7.

29. The actual environmental consequences of this particular contract and the electrical cable involved will be discussed *infra* at note 90-122, as they relate more directly to the international environmental scheme.

30. HYDRO-QUEBEC, TAMING, *supra* note 23, at 12.

31. *Id.* at 12, 13.

32. *Id.* at 11, 13, 15.

33. *Id.* at 13. Hydro-Quebec determined, quite astonishingly, that harvesting the drowned trees would be unprofitable. Additionally, the company proposed that they need not even clean up the trees because "over the long term, nature was as efficient at deforestation as man," and Hydro-Quebec need only wait until "wind, ice and currents uproot the trees and bring them to shore where all that needs to be done is collect them." *Id.* The company appears to be assuming a great deal of administrative power and skirting some serious environmental responsibilities.

34. *Id.* at 15. Hydro-Quebec boasts that this quantity of material taken from the landscape is "enough material to build the Great Pyramid of Cheops 80 times." *Id.*

35. *Id.* at 17.

36. *Id.* at 15. It is important to note that the climate of the St. James Bay area is tiaga and not resilient to change.

37. *Id.* at 11. Hydro-Quebec justified its taking by pointing out that "new possibilities for employment" for the 8,000 Crees "opened up" as a result of development. The Crees are a traditional tribe who exist by hunting, trapping, and fishing [how are they supposed to assimilate into Hydro-Quebec's plan?]. *Id.* The Crees and the Inuits were essentially "bought out" for $225 million and all future claims were waived. *Id.* at 48.

38. *Id.* at 14.

its proposals have to be reviewed by the American court system, was ready and willing to deforest and develop in preparation for the line from Quebec.[39] In fact, the NYPA sought judicial acceptance of various statutorily prohibited routings of the electrical cable in an effort to reduce financial costs to the company.[40] The contract for Hydro-Quebec's export of electricity to southeastern New York was a result of NYPA's search for less expensive non-oil-fired energy sources.[41] To the benefit of Hydro-Quebec, tapping electricity from the La Grande Complex was New York's only feasible alternative to new construction.[42] This view is held by at least two of Quebec's high level executives, Robert Bourassa and Guy Coulombe.[43]

B. The Primary Advocates

Quebec's Premier, Robert Bourassa, is perhaps the most concerned observer to the Hydro-Quebec - NYPA contract. To him, this agreement represents "billions of dollars of investment into his province," in addition to "creat[ing] thousands of jobs for Quebec workers."[44] Bourassa stated that his goal is to "lock" the New England States, including New York, into long-term electric power contracts, thus insuring a healthy economy for Quebec.[45]

The other major advocate of the Hydro-Quebec - NYPA contract is Guy Coulombe, president of Hydro-Quebec.[46] Coulombe expressed the strategy of his company: "We want to encourage them [the United States] to import Quebec electricity rather than build new power generating stations."[47] This seems to be precisely what New York is content to do, yet the environmental ramifications of such a decision to import electricity from over hundreds of miles may well be disastrous.[48]

III. Recent Environmental Mistakes and International Caselaw

Although the actual environmental effects of the Hydro-Quebec project will not be known for some time, one may hypothesize that

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39. *See supra* note 21.
40. *See, e.g, supra* note 21, at 45-56.
41. *See supra* note 21, at 3.
42. Freeman, *Hydro-Quebec to Seek Contracts for Power in U.S.*, Wall St. J., Mar. 19, 1986, at 14, col. 1 [hereinafter Freeman].
43. *Id.*
44. MacPherson, *New York Power Connection*, EMPIRE ST. REP., June 1986, at 10, 11 [hereinafter MacPherson].
45. Terry, *supra* note 27, at 44.
46. Freeman, *supra* note 42, at 14.
47. *Id.*
48. The specific environmental consequences of the Hydro-Quebec line will be discussed *infra* 96-123. As to sovereign concerns. Experts have posited that increased reliance on foreign sources of energy will cause dependence and lead to a scenario similar to that during the oil crisis. *See supra* note 21.

the fate of the system may be analogous to that of similar projects throughout the world.[49] With this background of what is at stake, historical international legal precedent should be examined in order to better determine the global environmental law implications of the Hydro-Quebec - NYPA power line.[50] In addition, an analysis of a possible means of liability through a recent Texas case will be studied.[51]

A. Current Dilemmas Relating to Electrical Power

In a report by the World Bank, officials speculate that the most critical environmental problem in developing countries is "indiscriminate deforestation and land clearing."[52] This has resulted in soil erosion, rapid water runoff and flooding, siltation in hydro power and irrigation projects, and agricultural losses.[53] The World Bank has been subjected to a great deal of scrutiny regarding its efforts in the developing world,[54] especially in India and Brazil.

In India, the Bank granted approximately $500 million to construct a dam to begin a hydro power generating facility.[55] Fortunately, a study was compiled which maintained that the dam would flood 900 square kilometers of land, displace over two million people, and decimate 33,000 hectares of teak and bamboo forests.[56] This study also predicated that the diseases malaria, goitre, cholera, and viral encephalitis would increase significantly.[57] Although not dispositive, this study's accuracy was not questioned; nevertheless, the project has not been abandoned.

Similarly, in Brazil, the World Bank loaned $450 million toward the costs of building a hydroelectric dam.[58] Soon after the project was initiated, one segment of the damming system was perceived as "an ill-conceived project which has had a substantial negative effect on the environment and on the AmerIndian population."[59] Ac-

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49. *See supra* notes 52-63 and accompanying text (discussing current environmental dilemmas).

50. *See infra* notes 62-88 and accompanying text (discussing ICJ standards which relate to international pollution).

51. *See infra* notes 61-68 and accompanying text.

52. C. Farnsworth, *Ecology Warning from World Bank*, N.Y. Times, September 20, 1985, a A9, col. 1 [hereinafter Farnsworth].

53. *Id.; see Rheem supra* note 10, at 18.

54. J. Bovard, The World Bank's Environmental Disasters, Executive Memorandum No. 167 (July 1, 1987) (available at the DICKINSON JOURNAL OF INTERNATIONAL LAW office) [hereinafter Memo].

55. *Id.*

56. *Id.* The study was compiled by the Indian Council of Science and and Technology. *Id.*

57. *Id.*

58. *Id.* Notably, results virtually identical to those maintained in the India case cited above did, in fact, occur. *See supra* note 9, at 15.

59. Memo, *supra* note 54. The quote was proffered by the former World Bank president, A.W. Clausen, in June 1986. Similarly, Senator Bob Kasten (Rep. Wisconsin) stated that

cordingly, the visionaries of the World Bank are sacrificing useable natural resources for speed and short-term benefits. Without proper environmental use, growth is forced and the long-term consequences of these hastily conceived panaceas will be realized.[60]

In a recent Texas scenario, more closely analogous to the dilemmas encountered at St. James Bay, the Houston Lighting & Power Company was ordered to pay $25 million in punitive damages for the risks to which it subjected school children in Houston Lighting & Power Company's construction of electrical lines over two school campuses.[61] Although the Court of Appeals of Texas chose to overrule a lower court on the issue of damages, *Houston Lighting* represents the first time the United States' judiciary has recognized a cause of action for the environmental harm resulting from electrical cable lines.[62] This case is of utmost importance to the legal proceedings which will most certainly result from the Hydro-Quebec - NYPA contract, as the Hydro-Quebec agreement encompasses far more territory over which electrical cables will lie and involves international boundaries.[63]

B. A Basis for Jurisdiction

Two stalwart cases which have stood the test of time in international law are the *Corfu Channel Case*[64] and the *Trail Smelter Arbitration.*[65] International law contains neither common rules nor customary standards specifically regarding environmental protection,[66] but *Corfu* and *Trail Smelter* enunciate prominent doctrines which concern both international duty and responsibility[67] and territorial sovereignty.[68] These two principles are both relevant and inherent

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work in Brazil "has resulted in deforestation on an unbelievable scale." *See* Fransworth, *supra* note 52.

60. *See generally* Elder, *Environmental Impact Assessment in Alberta*, 23 ALBERTA L. REV. 286 (1985) [hereinafter Elder].

61. *See generally* Houston Lighting & Power Company v. Klein Independent School District, No. B14-86-002-CV (Tex. Ct. App. Nov. 5, 1987). The Appellate Court overruled the damages award not because Klein failed to prove with scientific certainty that the electrical lines had a significant health effect, rather, in a condemnation proceeding, as in *Houston Lighting*, punitive damages are not recoverable. The scientific evidence proffered in *Houston Lighting* will be addressed *infra* note 121 and accompanying text [hereinafter *Houston Lighting*].

62. *ABC World News Tonight* (ABC television broadcast, Nov. 9, 1987). The segment cited discussed electrical power lines and questions surrounding higher incidences of cancer.

63. *See supra* note 29; *cf. infra* note 65.

64. Corfu Channel Case (U.K. v. Alb.), 1949 I.C.J. 4 (Judgment of Apr. 9) [hereinafter *Corfu*].

65. Trail Smelter Arbitration (U.S. v. Can.), 3 R. Int'l. Arb. Awards 1905 (1949) [hereinafter *Trail Smelter*].

66. Knapp, *Our Neighbors Keeper? The United States and Canada: Coping with Transboundary Air Pollution*, 9 FORDHAM INT'L. L.J. 159, 172 [hereinafter Knapp].

67. *Corfu*, *supra* note 64; *see infra* notes 69-77 and accompanying text.

68. *Trail Smelter*, *supra* note 65; *see infra* notes 78-84 and accompanying text.

within the purview of international environmental law, and therefore must be more fully considered.

1. Corfu and International Responsibility.—A fundamental principle of international law is responsibility.[69] The *Corfu Channel Case* should be interpreted as an invaluable judicial affirmation of the doctrine of state responsibility[70] and is indeed sufficiently analogous to the Hydro-Quebec scenario. Accordingly, in the international environmental law realm, *Corfu* represents the principle that there is an ". . . obligation of each state not to allow the nationals of other states to suffer pollution damage that might reasonably be prevented . . ." and warns of the ". . . liability of providing appropriate compensation to the injured party when that obligation is violated."[71]

The *Corfu Channel Case* involved two British destroyers which were damaged by mines in an Albanian controlled channel.[72] Although Albania protested a subsequent mine sweeping action by Great Britain on sovereignty grounds,[73] Great Britain claimed its response was necessary and requested compensation.[74] The International Court of Justice found Albania responsible,[75] and in rendering its decision, posited that a State may not, with actual or imputed knowledge, permit its territory to be so used as to bring undesirable effects upon another State.[76] Hydro-Quebec and the NYPA know of the dangers[77] which may result to each other's respective countries.[78] If the *Corfu* doctrine is applied, absolute liability of this "unholy alliance" between Hydro-Quebec and the NYPA may cause additional International Court of Justice dispute resolution and also impose heavy burdens upon the environment of northeastern North America—burdens which, once assigned, may never be corrected. Taken alone, this stance is fair, but in conjunction with the doctrine of *Trail Smelter*, this reasoning is compelling.

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69. I. BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 433-34 (3d ed. 1979) [hereinafter BROWNLIE].

70. Note that decisions of the International Court of Justice are merely persuasive and not binding on parties external to the litigation. R. Sugarman, *The International Joint Commission and Principles of International Law*, address at a conference held at Banff, Alberta, Canada, March 19-21, 1981, *reprinted in* Canadian Bar Association, Environmental Law Section, COMMON BOUNDARY/COMMON PROBLEMS: THE ENVIRONMENTAL CONSEQUENCES OF ENERGY PRODUCTION 48-54 (1982) [hereinafter Sugarman].

71. J. BARROS & D.M. JOHNSON, THE INTERNATIONAL LAW OF POLLUTION 69 (1974) [hereinafter Barros].

72. *Corfu*, *supra* note 64, at 57-59.

73. *Id.* at 59-62.

74. *Id.* at 59.

75. *Id.* at 60.

76. BROWNLIE, *supra* note 69.

77. *See generally* BIOLOGICAL EFFECTS, *supra* note 12; *see supra* note 21.

78. *See supra* notes 7, 19.

2. "Global Village"[79] and the Trail Smelter.—The term "global village" applies to the ever-increasing inter-dependence that each country shares with the other nations of the world. Thus, territorial sovereignty, once believed absolute,[80] is becoming tempered. The *Trail Smelter Arbitration* exemplifies this world-wide responsibility.

The *Trail Smelter* dispute arose when the United States alleged that sulfur dioxide fumes from an iron smelter at Trail, British Columbia, Canada, were causing damage within the state of Washington.[81] Canada and the United States agreed to let a tribunal arbitrate this case[82] which, based upon tenets of international law, concluded that:

> Under the principles of international law, as well as of the law of the United States, no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persona therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.[83]

The direct relevance of this holding to the circumstances of Hydro-Quebec is more clearly visible when the substantive law used by the International Court of Justice is scrutinized.[84] The award in the *Trail Smelter Arbitration* case was based upon United States case law and its precedents upon air and water pollution.[85] The importance of the tribunal's use of United States' precedent bring the *Houston Lighting & Power v. Klein*[86] dispute back into the international legal forum.

As there is no case law in the United States which specifically concerns electrical lines and their effects on both humans and the environment other than *Houston Lighting*, this case may be used as precedent in any international ruling by the International Court of Justice or any other tribunal.[87] The *Houston Lighting* litigation is not completed for Klein is seeking certiorari to the Texas Supreme Court in an effort to obtain $25 million in punitive damages.[88] Thus,

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79. "Global village" was coined by Marshall McLuhan, a notable Canadian politician.
80. BROWNLIE, *supra* note 69.
81. *Trail Smelter*, *supra* note 65, at 1941-48.
82. *Id.*
83. *Id.* at 1965. This language has been adopted by the international community under the 1972 Stockholm Declaration on the Human Environment. *Report of the United Nations Conference on the Human Environment*, U.N. Doc. A/Conf. 48/14 and Corr. 1 (1972), *reprinted in* 11 I.L.M. 1416 (1972) [hereinafter 1972 Declaration on the Human Environment].
84. *See, e.g.*, Knapp, *supra* note 66, at 177-78.
85. *Trail Smelter*, *supra* note 65.
86. *Houston Lighting*, *supra* note 61.
87. Granted, the ruling as to money damages in the *Houston Lighting* case was reversed, but the cause of action was upheld. *See id.*
88. *See supra* note 62.

the *Houston Lighting* decision may be of paramount significance to the future legal aspects of the Hydro-Quebec argument.

IV. The Unholy Alliance

The Hydro-Quebec - New York Power Authority contract is, in its simplest form, an agreement for Hydro-Quebec to provide 3,500 to 4,500 megawatts of electricity to southeastern New York State[89] from a hydroelectric plant capable of producing 10,282 megawatts of energy.[90] In exchange for Hydro-Quebec electricity, the New York Power Authority will not only pay for the energy supplied but will also provide a financial backing of approximately $18 billion U.S. dollars so Hydro-Quebec can meet its goals for both New York and other New England states.[91] From a purely "services-for-goods" viewpoint, this contract is easily justified. However, it is from an ethical and ecological standpoint that this Comment takes issue with the Hydro-Quebec - New York Power Authority contract.

A. The Costs

The monetary outlays of this project, though considerable, may be pale in comparison to the environmental costs the system will inflict upon both nature and humanity.[92] In addition to the obvious considerations such as deforestation and land development, new factors enter into the equation as a result of the system's size.[93] The cable lines involved in this international transfer of energy are more than twice as expansive as others that have been constructed in the world.[94] Scientists are left to extrapolate to the regional as well as international effects.[95]

B. The Consequences

1. The Consequences of the Hydro-Quebec Line on Nature.—Although without established proof regarding *all* of the ef-

89. Freeman, *supra* note 42.

90. Terry, *supra* note 27. To give the reader some appreciation of the power involved at the LaGrande Complex, 10,282 megawatts was approximately 10% of the entire hydro capacity of *all* of the nations of the Third World as of 1980. Flavin, *supra* note 9, at 15. The 10,282 megawatt figure is closer to 6% of the Third World's current capacity. *Id.*

91. MacPherson, *supra* note 44, at 11, 12.

92. *See infra* notes 96-123 and accompanying text (discussing the impact of Hydro-Quebec Lines on nature and man).

93. Telephone interview with a New York State Environmental Department official (Sept. 21, 1987) [hereinafter New York interview].

94. Hydro-Quebec interview, *supra* note 7. The simple fact that nothing of this size in this field has ever been developed leaves scientific evidence of environmental effects to conjecture at this point. *Id.* What *can* be said is that the effects on both man and nature will be greater than normal—perhaps four times that of a normal system's effects. *Id.*

95. *Id.*

fects that the Hydro-Quebec - NYPA cable network will have on nature, researchers can still point to early dilemmas which have arisen as a result of the St. James Bay dam reconstruction[96] and the initial stages of line construction through Quebec and New York.[97] As in the preliminary segments of construction, considerable deforestation on both ends of the cable route has destroyed a great number of trees.[98] This removal is not limited to the line's right-of-way. Access roads and clearing for construction machinery is also involved. Consequently, this development involves a great deal of destruction of the resources that animals require to survive.[99]

At least two species of animals are affected by the cable lines. The population of the Poulamon, or tommy cod, of the Ste-Anne-De-La-Perde, Quebec, area is rapidly decreasing.[100] Although these fish were caught and sold by the locals of Ste-Anne, natural ecological balance kept the tommy cod at a productive level for sustained life.[101] With the advent of the Hydro-Quebec's river rerouting and cable construction, the numbers of the tommy cod have fallen to dangerously low levels.[102]

The caribou population of the northeast is also predicted to decline significantly.[103] Just as the construction of the Alaskan Pipeline caused more than 1,000 caribou to drown as a result of their crossing of swollen rivers to breeding grounds in the northwest, the caribou of the northeast have been predicted to suffer a similar fate.[104] This is, and will continue to be, wholesale killing of the caribou because the environmental departments of both of the contracting parties realize that the caribou deaths are inevitable.[105]

The cable network will also affect the aesthetic beauty of the unspoiled region.[106] Granted, the majority of the land surrounding

96. *See supra* notes 33-37 and accompanying text regarding deforestation; land evacuation; tiaga redevelopment; and Cree and Inuit Indian relocation.

97. *See infra* notes 98-123 and accompanying text.

98. Hydro-Quebec interview, *supra* note 7.

99. Land is being reclaimed at an alarming rate which is leading to the rampant destruction of trees. The carbon dioxide that trees absorb and the oxygen that they emit is integral to sustaining human and animal life. New York interview, *supra* note 93.

100. Hydro-Quebec interview, *supra* note 7.

101. *Id.* Additionally, this will affect the fishing industry of the Ste-Anne-De-La-Peradi region economically. *Id.*

102. *Id.* In fact, economists in the region estimate that the continued disappearance of the poulamon will cost the local economy approximately $3 million in lost revenues, not to mention that the poulamon is a staple in the diet of the people of the Ste-Anne-De-La-Peradi region during the winter months. *Id.*

103. New York interview, *supra* note 93.

104. *Id.* The mass deaths of a species which is already not of a significant population to sustain an adequate ecological balance were a result of diverted river systems in the Alaska area. *Id.*

105. Hydro-Quebec interview, *supra* note 7.

106. *Id.*

the cable easement is unpopulated by people[107] and, thus, there are no households to complain of nearby, unsightly wires. Fortunately for environmentalists, this is the precise reason there has been a growing uproar in communities such as the ones surrounding Grondines, Quebec.[108] The Grondine region is described as "breath-takingly pure,"[109] but Hydro-Quebec has planned to build generating towers and lines close enough to the area that they detract from this region's natural beauty.[110] Additionally, Hydro-Quebec has planned to run its lines across Orlean's Island, an island ripe with seventeenth century architecture.[111] The aesthetic ramifications of this choice of cable locale has caused the Orlean's Island site to become a "hot issue."[112]

Finally, two more visibly global environmental consequences are in question: ice movement and water temperature increase.[113] Although both dangers have been addressed by Hydro-Quebec and the New York Power Authority, their analyses have been cursory. With river diversion and damming, there will be changes in water flow.[114] Will the damming of the La Grande River and St. James Bay result in changes in water temperatures? What effects will an increased water temperature have upon sea life? These questions and others need to be answered *before* the contract process, not after line electrification.[115]

2. The Consequences of Hydro-Quebec on Humans.—As mentioned above, the Cree and Inuit Indians will be drastically affected by the Hydro-Quebec project.[116] But new scientific evidence posits that anyone living near the Hydro-Quebec - NYPA cables may also be affected — studies show an increase in cancer.[117] The New York report has buttressed the hypothesis that there is an association between residential exposure to magnetic fields, like those in-

107. *Id.* Few, if any, roadways were even in use in this area. *Id.*

108. *Id.*

109. *Id.*

110. *Id.* This is one area, but there are several more like it in Quebec which will be subject to the same derogation of aesthetic appeal. *Id.*

111. *Id.* Even Hydro-Quebec executives feel that this island should not have been so burdened. *Id.*

112. *Id.* Accordingly, this author submits that aesthetics are no longer a secondary consideration, but instead, now constitute a valid cause for discontent.

113. *Id.* Changes of this magnitude may cause some of the most catastrophic dilemmas in current history; for example, the flooding of the Great Lakes.

114. Hydro-Quebec, *Taming*, *supra* note 23, at 4.

115. Hydro-Quebec interview, *supra* note 7. The source raised these questions to which researchers at Hydro-Quebec have no firm answers. *Id.* The source believes that studies are being initiated at Hydro-Quebec, but they will not be completed until after line construction is concluded. *Id.*

116. *See supra* note 37.

117. BIOLOGICAL EFFECTS, *supra* note 12. Note that this report was issued subsequent to the Hydro-Quebec - NYPA contract.

volved in energy transfer, and incidence of cancer in children and adults.[118] The New York group examining this phenomenon found a positive correlation between distribution line wiring and increased cancer risk,[119] specifically citing, *inter alia*, leukemia and brain tumors.[120] Additionally, the study postulates that there are a variety of behavioral and nervous system effects that may temporarily impact human function.[121]

The results of this study are not dispositive, yet they do afford great weight in conjunction with testimony of experts in *Houston Lighting & Power* who proffered similar consequences of exposure.[122] On appeal, the New York study may change the result of the damages issue in *Houston Lighting*. Regardless of the final determination in *Houston Lighting*, the queries that the New York study raises must be analyzed and answered, for catastrophic results may occur without haste. Indeed, irrespective of the effect on humans, a power line of this magnitude will most certainly have deleterious impact upon animal and plant life.[123]

V. Hydro-Quebec - NYPA and International Law and Policy

This contract between Hydro-Quebec and the New York Power Authority violates doctrines and resolutions on three levels—multilateral agreements, such as the Charter of Economic Rights and Duties of States[124] and the 1972 Declaration on the Human Environment;[125] bilateral treaties, such as the Great Lakes Water Quality Agreement;[126] and agreements specifically respecting nature, namely, the World Charter for Nature.[127] In addition to the

118. *Id.* at 9. The initial study which came to this conclusion was completed in Denver, Colorado. The New York study expounded upon the Denver results.

119. *Id.* at 9-10, 72-86. Distribution line wiring simply describes low voltage overhead electrical wires.

120. *Id.* at 10, 72-86.

121. *Id.* at 10, 95-125. The New York panel reported several findings: increased proliferation of cancer cells in agar; alterations of intracellular calcium concentrations; significant decreases in the concentration of two neuro-transmitter metabolities in cerebral spinal fluid; increased susceptibility to seizures in rodents; aberrations in the circadian rhythms in squirrel monkeys; behavior alterations of rats exposed to electricity *in utero* and during first days of life; and lengthened cardiac interbeat interval in humans. *See generally id.*

122. Houston Lighting, *supra* note 60. Dr. Nancy Wertheimer, an epidemiologist, testified that studies show a correlation between power lines and cancer; further, children living near electrified wires are two to three times more likely to get cancer than children who do not. *Id.*

123. Albeit this is the author's own theory, but examination of this problem from a common-sense standpoint must result in the proposed conclusion.

124. *Charter of Economic Rights and Duties of States*, U.N. Doc. A/Res 3281 (XXIX) (1975) *reprinted in* 17 I.L.M. 251 (1975) [hereinafter Charter of Economic Rights].

125. 1972 Declaration on the Human Environment, *supra* note 80.

126. Great Lakes Water Quality Agreement, Apr. 15, 1972, U.S.-Canada 23 U.S.T. 302, T.I.A.S. No. 7312 *reprinted in* 11 I.L.M. 694 (1972) [hereinafter Great Lakes].

127. *Resolution on a World Charter for Nature*, U.N. Doc. A/Res. 37/7 (1982) [hereinafter World Charter for Nature].

formal abridgments mentioned above, the activities between Hydro-Quebec and the NYPA are in derogation of international environmental common law, itself a mystical term of art.[128]

A. Multilateral Melee

Two of the most fundamental global pacts are the Charter for Economic Rights[129] and the 1972 Declaration on the Human Environment.[130] The Charter of Economic Rights, though not promulgated specifically for the benefit of the environment, posits two considerations that must be evaluated prior to any international or national economic development.[131] The Preamble of the Charter establishes that the document is "[D]esirous of contributing to the creation of conditions for . . . [t]he protection, preservation and enhancement of the environment."[132] From this underlying principle, it can be inferred that economic development which fails to protect or preserve the environment is contrary to the United Nations' goals and, thus, should not be internationally condoned.

The language chosen in Article 30 of the Charter is more expansive and persuasive as doctrine.[133] Article 30 dictates that:

> The protection, preservation and enhancement of the environment for the present and future generations is the responsibility of all States. All States shall endeavor to establish their own environmental and developmental policies . . . . All States have the responsibility to ensure that activities within their jurisdictions or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. All States should cooperate in evolving international norms and regulations in the field of the environment.[134]

The land and water development plan of Hydro-Quebec - NYPA must comply with the tenet of this mandate. To date, Hydro-Quebec's massive deforestation and animal displacement, not to mention the untold effects of its hydroelectricity on animals and plants, is in direct conflict with the basic components of the Charter for Economic Rights.[135] This is not, however, Hydro-Quebec - NYPA's only

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128. *See infra* notes 163-64 and accompanying text. Although international law, *per se*, does not yet exist on the hazards of electrical power and international duty, much of this material can be analogized to the Hydro-Quebec scenario.

129. Charter of Economic Rights, *supra* note 124.

130. 1972 Declaration on the Human Environment, *supra* note 83.

131. Charter of Economic Rights, *supra* note 124, Preamble (f), Art. 30.

132. Charter of Economic Rights, *supra* note 124, Preamble (f).

133. *See generally* Charter of Economic Rights, *supra* note 124, Art. 30.

134. *Id.*

135. In fact, the hydropower development initiated in Brazil and India as discussed earlier in this Comment also typify developed countries' exploitation of the environment in developing nations. *See supra* notes 52-60.

transgression in international policy.[136]

The first environmentally protective international policy remains at the cornerstone of international environmental law.[137] The 1972 Declaration on the Human Environment proclaimed that "[t]he protection and improvement of the human environment is . . . the duty of all government[s]."[138] The Declaration is borne of the *Corfu* and *Trail Smelter* decisions by the International Court of Justice,[139] for the Declaration stipulates that responsibility be accepted by all those who transgress the environmental goals of this document.[140]

Undoubtedly, the most oft-quoted passage of the Declaration is Principle 21,[141] which reads:

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.[142]

The unifying concept expounded by this Principle is essentially: If one country destroys resources, it must be certain all effects stay within its legal jurisdictional boundaries.[143] Hydro-Quebec and the New York Power Authority may breach this tenet for, irrespective of caribou or tommy cod migration, the potential impact of shifting ice, raising water temperature, increased incidence of cancers, and regional deforestation[144] constitute ". . . activities [which] . . . cause damage to the environment of other States . . . ."[145]

Finally, Principle 18 of the Declaration urges that "[s]cience and technology, as part of their contribution to economic and social development, must be applied to the identification, avoidance and control of environmental risks and the solution of environmental problems and for the common good of mankind."[146] Indeed, the alliance between Hydro-Quebec and the New York Power Authority is far from searching for solutions to environmental problems but, in-

136. *See, e.g.*, 1972 Declaration on the Human Environment, *supra* note 83 (specifically Principle 21).
137. *Id.*
138. *Id.* at Proclamation 2.
139. *See supra* notes 64-65.
140. 1972 Declaration on the Human Environment, *supra* note 83, at Proclamation 7.
141. *Id.* at Principle 21.
142. *Id.*
143. *Id.*
144. *See supra* notes 33-37 and 96-123.
145. 1972 Declaration on the Human Environment, *supra* note 83, Principle 21.
146. 1972 Declaration on the Human Environment, *supra* note 83, Principle 18. Although broad in scope, the key to Principle 18 with respect to the Hydro-Quebec - NYPA agreement is: ". . . identification, avoidance, and control of environmental risks . . . ." *Id.*

stead, seems to be perpetrating ecological disaster. Consequently, two major multinational agreements have been disregarded by Hydro-Quebec and the NYPA, and furthermore these two parties' infractions do not end here.

B. Bilateral Breach

In 1972, the United States signed a bilateral treaty with Canada which addressed the deterioration of the Great Lakes river system.[147] Concerned with preventing further pollution, the two countries signed the Great Lakes Water Quality Agreement[148] just prior to the 1972 Declaration Conference in Stockholm.[149] Thus, the Agreement came at a time of global concern over environmental issues.[150] The Great Lakes Agreement had an even broader significance than initially believed.[151] As a general water quality provision, the Agreement requires that the system be "[f]ree from substances entering the waters as a result of human activity in concentrations that are . . . harmful to human, animal or aquatic life."[152] Certainly, the rerouting, draining, and filling of the rivers which constitute part of the Great Lakes System should fall under this provision in addition to the possibilities for water temperature increase at the dam site and underwater cable crossings.[153] Both Quebec and the United States will breach the Great Lakes Water Quality Agreement if the cable system is electrified.

C. The Disaffirmance of the World Charter for Nature

A final document which the Hydro-Quebec - NYPA contract sidesteps is the World Charter for Nature.[154] Throughout its text, the World Charter for Nature recognizes the need for workable measures at both national and international levels to protect nature.[155] In particular, the World Charter is "[P]ersuaded that: . . . [L]asting benefits from nature depend upon the maintenance of es-

147. Great Lakes, *supra* note 126.

148. *Id.* One of the stated purposes is to prevent "further pollution of the Great Lakes System owing to continuing population growth, resources development and increasing use of water; . . . ." *Id.*

149. *Id.* The Agreement was entered into force April 15, 1972. *Id.*

150. Bilder, *Controlling Great Lakes Pollution: A Study in United States-Canadian Environmental Cooperation* in LAW, INSTITUTIONS & THE GLOBAL ENVIRONMENT 294 (J.L. Hargrove ed. 1972) [hereinafter Bilder].

151. *Id.*

152. Great Lakes, *supra* note 126, Art. II(d).

153. Hydro-Quebec interview, *supra* note 7. Studies are currently being completed, albeit retrospectively, on the actual temperature increases involved in running the cables under the St. Lawrence River.

154. World Charter for Nature, *supra* note 127. Here it is important to note that the U.S. was the only country of 112 voting members that disfavored adoption of the World Charter. *Id.*

155. *See generally id.*

sential ecological processes and life-support systems and upon the diversity of life forms, which are jeopardized through excessive exploitation and habitat destruction by man."[156] The Charter additionally propounds that "[E]cosystems and organisms, as well as land, marine, and atmospheric resources that are utilized by man, shall be managed to achieve and maintain *optimum sustainable productivity*, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist."[157] Finally, the World Charter for Nature condemns activities likely to cause irreversible damage to nature[158] or activities which pose a significant risk to nature.[159]

Although precious little has been written on the implementation of these principles, they do appear facially simple and easily understood. In essence, the United States and Canada have infringed upon both the letter and the spirit of the World Charter. Hydro-Quebec and the New York Power Authority have exploited the environment and currently are destroying the natural habitat of the tommy cod and caribou;[160] they will fail to foster "optimum sustainable productivity" for either species;[161] and they have reaped wholesale changes in the environment that will, indeed, be irreversible.[162] As a result, the World Charter for Nature has become another powerless document issued by the United Nations.

With respect to Hydro-Quebec and the New York Power Authority's violations of the four above-cited legal agreements, it is not mystery why international environmental law is an ineffective tool for dispute resolution. Critics of international law say that international law does not exist, for the international world will always lack the vision necessary to promulgate enforceable and effective standards.[163] Therefore, it is clear that changes are needed in this system in an effort to create a more ecologically-respecting international community.[164]

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156. *Id.* at ANNEX.

157. *Id.* at General Principles 4 (emphasis added).

158. *Id.* at General Principles 11(a).

159. *Id.* at General Principles 11(b).

160. *See supra* notes 100-105.

161. *Id.*

162. *See supra* note 32-36.

163. *See generally* Carroll, *On Living Together in North America*, 12 DEN. J. INT'L L. & POL'Y 35 (1982-1983) [hereinafter Carroll]; *But cf.* Judge Phillip Jessup's rallying cry that the concept of transnational concerns and law is "all the law which regulates action or events that transcend national frontiers . . . [it] includes both civil and criminal aspects . . . and . . . both public and private international law . . . ." P.C. Jessup, *Transnational Law* (Storrs Lectures on Jurisprudence, 1956).

164. *See generally* Carroll, *supra* note 163.

VI. Changes Needed in International Environmental Law

Theorists have proffered several hypotheses as to what will cure international apathy concerning the environment.[165] These theories range from changes in implementation[166] to changes in pre-construction evaluation,[167] to changes in ideological thought.[168] Viable alternatives to the current global state of affairs concerning effective international environmental law may be exacted from these postulations, whether one course of action or all three methods of transformation are selected.

A. Implementation Modification

In 1985, Canadian lawmakers contemplated an environmental pollution control which would create criminal liability in the event of a breach of this obligation.[169] Perhaps this suggestion should be implemented internationally, creating a cause of action for global crimes against the environment. Some would view this measure as excessive,[170] but it may well be the only way in which to change current thought, or lack thereof, about international pollution.

Former Chairman of the United States section of the International Court of Justice, Robert Sugarman, sees the problem as lying in implementation at the judicial level.[171] Sugarman confesses that the International Court of Justice (ICJ) is to blame in part, as its scope is broad, but its depth is shallow,[172] thus affording only limited remedies in water-related controversies.[173] "The ICJ has no direct authority to either implement or enforce its recommendations,"[174] and this has become a major problem of international cooperation in

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165. *See infra* notes 166-84.

166. Bilder, *supra* notes 150; Sugarman, *supra* note 70; *see generally* Prabhu, *Canada's Proposed Legislation on Crimes Against the Environment*, 28 ENV'T June 1986, at 14 [hereinafter Prabhu].

167. Somers, *Transboundary Pollution and Environmental Health*, 29 ENV'T June 1987, at 6 [hereinafter Somers].

168. J. Roberts, *Transboundary Pollution: Canada's Concerns and Expectations*, address at conference held at Banff, Alberta, Canada, March 19-21, 1981, *reprinted in* Canadian Bar Association, Environmental Law Section, COMMON BOUNDARY/COMMON PROBLEMS: THE ENVIRONMENTAL CONSEQUENCES OF ENERGY PRODUCTION, 10-14 (1982) [hereinafter Roberts]; Chananie, *Reverence for Life and Rights for Nature* 3 PACE L.R. 689 (1982-1983) [hereinafter Chananie].

169. Prabhu, *supra* note 166 at 14. As of November, 1987, the Canadian proposition has yet to be adopted.

170. *Id.* at 15.

171. *See generally* Sugarman, *supra* note 70. Sugarman continues to view the ICJ as effective but still lacking in enforcement power.

172. *Id.* at 48-49.

173. *Id.* at 49, 53.

174. Bilder, *supra* note 150 at 388. "There is no obligation upon either government to actually implement the Commission's recommendations, even if approved, and their subsequent impact is hard to determine." *Id.*

the environmental field.[175] The power of this tribunal is essentially emasculated; without a clear granting of additional powers, perhaps by resolution, the viability of the ICJ is suspect.

B. Phasing Out Ad Hoc Decision-making

The majority of environmental disputes between the United States and Canada are currently resolved on an *ad hoc* basis.[176] Although an *ad hoc* dispute resolution does provide flexibility in the decision-making process,[177] the major complaint regarding *ad hoc* evaluation is unpredictability of future concerns.[178] Theorists shun this *ad hoc* approach and instead rely upon international accord.[179] They posit that the decision-making should be completed before a dilemma can arise.[180] Briefly, the three-part tier of the international accord requires parties to: evaluate the nature and size of the pollution potential; estimate the risks involved; and set up international programs for risk management.[181] Thus, the accord will enable international leaders to initiate a particular strategy for pollution and environmental damage before the affecting events transpire.

C. Change in Thought about the Environment

As citizens of the world we must rid ourselves of the thought that nature is somehow inferior to man and separate from man.[182] This homocentric—or human-centered—attitude is founded on a vision that nature exists solely for the benefit of man, and nature has no inherent worth in and of itself.[183] People must understand that single actions, such as constructing a hydroelectric dam and laying hundreds of miles of cables can cause irreparable harm to the environment. Man's incessant upset of the balance of nature creates ever-increasing dangers to his own well-being.[184] Perhaps international re-education about the importance of the environment to sustained human life will disengage man from his homocentric view of the world. The promulgation of homocentric dogma must end if the citizens of the world are to respect the international environment.

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175. *Id.*

176. Carroll, *supra* note 163, at 35. *Ad hoc* decision-making refers to results which are fashioned from "whatever is immediately available." WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 56 (9th ed. 1987).

177. *Id.* at 40-41. This is the classic reason offered for *ad hoc* dispute resolution. *See id.*

178. *Id.* at 41.

179. Somers, *supra* note 167, at 7.

180. *Id.* at 32. One may also find fault with this rationale for it requires those signing the accord to be soothsayers and accurate predictors of future environmental harm.

181. *Id.*

182. Chananie, *supra* note 168, at 691.

183. *Id.* at 689.

184. *Id.* at 704.

VII. Conclusion

By the mid-1990s, Hydro-Quebec will provide huge quantities of electricity to energy-hungry New Yorkers. The costs to the environment will be substantial: deforestation, animal deaths and forced migration, aesthetic ruin, increased risks of cancer, possible ice shifts, and higher water temperatures in the northern latitudes. Who will be responsible for these costs? In theory, the international doctrine of responsibility would hold Hydro-Quebec and the New York Power Authority culpable, but with the gradual derogation of international environmental law, it is likely that no entity will be held accountable.

Changes are needed in this system if humanity is to survive. Indeed, once the environment has been affected by a project such as this, postscriptive measures will be inadequate. Accordingly, societies of the world must, in unison, voice their concern in an effort to effectuate useful international environmental law. Without this awareness, companies such as Hydro-Quebec have a *de facto* license to destroy the ecological system upon which our lives depend. Further study must be taken and analyzed *before* a project such as the Hydro-Quebec - New York Power Authority contract is initiated. For once ravaged, the environment will never be the same.

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