IN THE MATTER OF THE APPLICATION OF ONTARIO HYDRO AND THE NEW YORK POWER AUTHORITY FOR APPROVAL OF THE OPERATION AND MAINTENANCE OF A BOOM NEAR THE OUTLET OF LAKE ERIE TO REDUCE THE DISCHARGE OF ICE INTO THE NIAGARA RIVER.

ORDER OF APPROVAL

WHEREAS Lake Erie is a boundary water within the meaning of the Preliminary Article of the Boundary Waters Treaty which was signed on January 11, 1909; and

In accordance with Article III of the Boundary Waters Treaty, Ontario Hydro and the New York Power Authority, formerly Power Authority of the State of New York, hereinafter referred to as the Applicants, submitted, through Governments, complementary Applications dated March 2, 1964, to the International Joint Commission for its approval of the construction and operation, on a test basis, of a boom in Lake Erie near the entrance to the Niagara River;

The Commission, by Order of Approval dated June 9, 1964, approved, on a trial basis, the construction and operation by Ontario Hydro and the New York Power Authority of a boom near the outlet of Lake Erie to reduce the discharge of ice into the Niagara River, the said approval expired on May 15, 1965;

By Supplementary Order of Approval, dated May 25, 1965, the Commission amended the Order of Approval by providing for completion of boom disassembly by May 15 and extending the expiration date of the said Order to May 15, 1966;

By decision dated April 10, 1966, the Commission extended the termination date of the said Order, as amended to May 15, 1967;

By further decision dated July 12, 1967, the Commission extended the termination date of the said Order, as amended, to May 15, 1972;

By further Supplementary Order of Approval, dated October 3, 1969, the Commission amended the Order of Approval and approved the concept of a flexible date for opening and closing the ice boom, provided for consultation by the International Niagara Board of Control, hereinafter referred to as the Board, as to the opening date and extended the termination date of the said Order, as amended, to May 15, 1970;
By further decision dated August 6, 1970, the Commission extended the termination date of the said Order, as amended, to May 15, 1975;

By further decision dated April 21, 1975, the Commission extended the termination date of the said Order, as amended, to May 15, 1980;

By Application dated November 13, 1979, the Applicants petitioned the Commission for an extension of the termination date for an indefinite period, subject to existing conditions;

In accordance with the Commission's Rules of Procedure, the Commission received Statements in Response, and Statements in Reply, it gave due notice and held public hearings on July 8, 9 and 10, 1980 at Niagara Falls, Ontario, Buffalo, New York and Hamburg, New York, respectively, and received evidence from the Board, the Applicants, interested public officials, private citizens and corporations;

The Board stated that the ice boom has functioned as intended and proven to be effective and beneficial to the many interests along the Niagara River without a measurable detriment to others, that they had not received any conclusive information that would substantiate the allegation that the ice boom lengthens the ice season or increases erosion of Lake Erie beaches, that no other method of ice control can perform as satisfactorily as the boom and that since weather and ice conditions vary widely from year to year, the flexible date of opening the ice boom has proven its merit;

After careful consideration of the evidence given at the 1980 hearings the Commission by Order of approval dated September 25, 1980, approved the Application for a period ending March 15, 1985.

In light of continued debate and uncertainty over the effect of late removal of the ice boom on temperatures in the Buffalo region, Commissioners Charles M. Bédard and Robert C. McEwen were designated to consider ways of resolving this continuing issue.

Consequently, a study by an independent panel of experts under the auspices of the National Academy of Sciences was requested by the Commission in 1983. On March 3 and 4, 1983, the Commission held public meetings in Buffalo, New York, and Fort Erie, Ontario, to hear the views of the public on the proposed terms of the study. These views were considered by the panel in designing the scope of the study. The report of the panel was transmitted to the Commission and released to the
public in November 1983. The panel found, among other things, that the ice boom will cause no cooling to local climates if it is removed when there is 250 square miles (650 square kilometres) of ice remaining on Lake Erie.

In addition, the panel recommended that the ice boom should be opened by April 1 and removed for the summer as soon as practical, unless ice cover surveys show that there is more than 250 square miles (650 square kilometres) of ice east of Long Point.


(a) The boom shall be located in Lake Erie at the head of the Niagara River about two miles upstream from the Peace Bridge, in an area where the water velocities are relatively low.

(b) The boom shall consist of a series of floating sections anchored at intervals to the bed of the river; shall be equipped with devices to facilitate the prompt removal of any or all sections of the boom should the need arise for such actions; and shall be equipped with suitable markers as may be prescribed by United States and Canadian Coast Guard regulations.

(c) The Applicants shall install, operate and maintain the boom including provisions for the emergency opening and complete removal of the boom, in accordance with plans submitted by the International Niagara Board of Control on December 11, 1981.

(d) Installation of the floating sections of the boom shall not commence until the water temperature at the Buffalo water intake reaches 4°C (39°F) or such other date as may be communicated to the Applicant by the Commission, through the Board, having regard to the weather and other conditions prevailing in that year.

(e) All floating sections of the ice boom shall be opened by April 1, unless ice cover surveys on or about that date show there is more than 250 square miles (650 square kilometers) of ice east of Long Point. The ice boom opening may be delayed until the amount of ice east of Long point has diminished to 250 square miles (650 square kilometers). Complete disassembly and removal of all remaining floatation equipment shall be completed within two weeks thereafter. Notwithstanding any
other provisions of this Order, the Commission retains the right to require retention, opening or removal of all or any part of the boom at any time because of the existence of an emergency situation.

(f) The Applicants shall be responsible for the operation and maintenance of the boom, including its removal in whole or in part, so as to minimize possible adverse effects to all interests as compared with preproject conditions.

(g) In order that the Board may be in a position to provide informed advice to the Commission as to the opening date of the boom, the Board shall consult each year with representatives of the Applicants and such interests as the Board considers may be affected by the opening of the boom.

(h) Ontario Hydro shall be responsible for the disposition of claims for physical injury or damage to persons or property occurring in Canadian territory in connection with the maintenance, operation, installation or removal of the said boom or any part of it, and for the satisfaction of any such claims that are valid.

(i) The New York Power Authority shall be responsible for the disposition of claims for physical injury or damage to persons or property occurring in United States territory in connection with the maintenance, operation, installation or removal of the said boom or any part of it, and for the satisfaction of any such claims that are valid.

(j) The Applicants shall keep the Commission currently informed, through the Board, regarding the installation, operation and removal of the boom, the formation, retention and recession of the ice cover and ice conditions in the Niagara River. Formal reports shall be submitted through the Board each month or more frequently as conditions may warrant or as the Commission may require.

The operation of the ice boom will be reviewed by the Commission when circumstances require but no less frequently than once every five years.

This approval shall terminate thirty days after the signing of the Order of Approval, unless before that date, the Applicants have informed the Commission in writing that they accept all conditions as set forth herein.
AND IT IS FURTHER ORDERED that the Commission will retain jurisdiction over the subject matter of these Applications and, after giving such notice and opportunity to all interested parties to make representations as the Commission deems appropriate, may make such further Orders or Orders relating thereto as may be necessary in the judgement of the Commission.

Signed this 18th day of January, 1984.

Robert C. McEwen  
J. Blair Seaborn  
L. Keith Bulen  
E. Richmond Olson  
Donald L. Totten  
Charles M. Bécard