INTERNATIONAL JOINT COMMISSION

IN THE MATTER OF THE APPLICATION BY THE ST. LAWRENCE SEAWAY AUTHORITY FOR APPROVAL TO EFFECT PARTIAL CLOSURE OF A SECTION OF THE ST. LAWRENCE RIVER BETWEEN TOUSSAINT ISLAND AND PRESQU'ILE NEAR IROQUOIS, ONTARIO.

ORDER OF APPROVAL 6 February 1976

WHEREAS

The St. Lawrence River above Iroquois Lock is a boundary water within the meaning of the Boundary Waters Treaty, which was signed on 11 January 1909;

The St. Lawrence Seaway Authority, hereinafter referred to as the Applicant, is a proprietary Crown Corporation established by the St. Lawrence Seaway Authority Act, R.S.C. 1970, c. S-1, and listed in Schedule "D" of the Financial Administration Act R.S.C. 1970, c. F-10;

The Applicant, in accordance with Article III of the said Treaty, submitted through the Government of Canada under the date of October 17, 1975 an application to the Commission to effect partial closure of that section of the St. Lawrence River designated as the Canadian Channel and situated entirely on the Canadian side of the International Boundary, between Toussaint Island and Presqu'ile immediately above Iroquois Lock near Iroquois, Ontario;

The Applicant has stated that the request to effect partial closure of the Canadian Channel at this location has resulted from an increasing number of accidents to downbound vessels entering Iroquois Lock during the last five years; that vessels involved in these accidents are affected by the currents from the Canadian Channel which cross the navigation channel at an angle of 40 degrees with a speed of approximately two and one-half feet per second; and that consequently when ships enter the stillwater area of the upper tie-up wall to Iroquois Lock, the shipmaster is sometimes unable to make the necessary corrective manoeuvres quickly enough to avoid striking the approach wall heavily;

The Applicant has stated that soundings taken in July 1975 indicated the average cross section of the main channel to be 93,250 square feet and the Canadian Channel to be 6,600 square feet; that there should be no measurable effect on the water level above Toussaint Island; that no difficulties with land acquisition are foreseen; that there are no recreational interests in the vicinity of the proposed works; that the Canadian Channel is not used by commercial navigation; and that the opening

between the end of the dyke and Toussaint Island will be sufficient to accommodate pleasure craft;

The Applicant stated that it is proposed to place, in a water depth averaging 8 feet, dense glacial fill which was excavated from the present river bed in 1958, to form a dyke extending from the Presqu'ile side of the Channel toward Toussaint Island leaving an opening of at least 100 feet and that construction of the dyke will be terminated once the cross currents in the area above the lock reach a speed equivalent to 0.5 feet per second when the river flow is 320,000 cubic feet per second;

The International St. Lawrence River Board of Control at the request of this Commission studied the effects that a causeway between Toussaint Island and Presqu'ile would have on levels, flows and ice conditions and other regulation aspects pertaining to the International Section of the St. Lawrence River. The Board reported that the proposed causeway should not cause any violations of the stipulated Channel velocity requirements contained in the Commission's Orders of Approval for the St. Lawrence Project, or the Channel depth requirements stipulated by the St. Lawrence River Joint Board of Engineers, and that there would be some effects on velocities and head losses which cannot at the present time be accurately predicted and that such effects could be determined from observations and gauge readings after the causeway has been constructed;

Notices that the Application had been filed were published in accordance with the Rules of Procedure of the Commission on 10 November 1975. No Statements In Response were presented to the Commission;

Pursuant to published notices Public Hearings were held in Cornwall, Ontario on 6 January 1976 and in Watertown, New York on 7 January 1976 at which all persons interested were afforded convenient opportunity of presenting evidence to, and being heard by, the Commission;

At the Public Hearings testimony was presented on behalf of the Applicant describing the purpose, nature and method of constructing the proposed dyke. It was stated that since 1969 there have been a total of 55 accidents at the upper approach wall at Iroquois Lock involving 46 ocean vessels and 9 inland vessels and that it is possible that future accidents could close the Seaway and cause extreme environmental damage;

At the Public Hearings testimony presented on behalf of Ontario Hydro stated that they had no objections to the building of the proposed dyke and that the effects on ice formation would be negligible;

A statement filed on behalf of the Power Authority of the State of New York stated that they had no objection to the proposed causeway on the understanding that the International St. Lawrence River Board of Control plans to monitor the effects following construction and would report to the Commission if the effects were markedly different than other studies indicated;

At the hearings there was no objection to the construction of the proposed dyke by the Applicant;

By letter to the Commission dated 2 February 1976, the Government of the United States stated that while in its view application was not required by the Boundary Waters Treaty of 1909, it had no objection to approval of the Application provided that the Commission, in its Order of Approval, retained jurisdiction over all aspects of the construction, maintenance, and any required alterations, including removal of the proposed works, and provided appropriately for the protection and indemnification of interests in the United States which might in some eventuality be injured by the proposed works; and

WHEREAS the Commission, after considering the application, testimony presented at the Public Hearings and statements submitted to the Commission, has determined that the proposed dyke extending from Presqu'ile toward Toussaint Island should be approved pursuant to the said Treaty, subject to the conditions hereinafter set forth.

NOW THEREFORE THIS COMMISSION ORDERS AND DIRECTS that the construction by the St. Lawrence Seaway Authority of a dyke to effect a partial closure of the Canadian Channel between Presqu'ile and Toussaint Island in the St. Lawrence River immediately upstream of Iroquois Lock is hereby approved subject to the following conditions:

- 1. No construction shall be undertaken until the final plans and schedule of construction have been approved by the Commission. The Applicant shall furnish the Commission four copies of the above noted documents.
- 2. Before commencing construction, the Applicant shall obtain formal approval from the Ontario Ministry of Natural Resources for the construction of said dyke, shall obtain written permission from Ontario Hydro to use their property for access to and use of Presqu'ile, shall obtain any other required governmental approvals; and shall deliver to this Commission two copies of each of the required documents.

- 3. The dyke shall have a top width of not less than fifteen feet and sufficient rock protection to resist erosion. The said dyke shall extend from Prequ'ile to a point one hundred feet from Toussaint Island, or to a point which produces an equivalent cross current velocity of 0.5 feet per second between the upper entrance to Iroquois Lock and Toussaint Island when the total flow of the St. Lawrence River at Iroquois is 320,000 cubic feet per second whichever is the greater distance from Toussaint Island. The opening between the dyke and Toussaint Island shall be deep and wide enough to permit safe passage of pleasure craft with a five foot draft through the Canadian Channel.
- 4. The Applicant shall deliver four copies of the "as constructed" drawings to this Commission within sixty days after construction has been completed.
- 5. The Applicant shall maintain the said dyke in such condition that it shall perform its intended function; and shall permit duly authorized representatives of the Commission or of the International St. Lawrence River Board of Control to inspect the works at any reasonable time.
- 6. During construction of the dyke, the Applicant shall measure the cross currents between the upper entrance to Iroquois Lock and Toussaint Island. During and after construction the Applicant shall monitor, on a continuing basis, the effect of the partial closure of the Canadian Channel on levels and flows under both open-water and ice conditions. These programs shall be under the supervision of the International St. Lawrence River Board of Control.
- 7. In the event that in the judgement of the Commission the monitoring program, referred to in Condition 6 above or any other evidence, indicates the need for modifying or removing the said dyke, the Applicant upon a communication from the Commission shall, without delay, perform such remedial action as directed.
- 8. The Applicant shall pay for all costs associated with the construction of the dyke, its maintenance, the monitoring program identified above, and any remedial action required by the Commission.
- 9. The Applicant shall be responsible for the disposition of claims for physical injury or damage to persons or property occurring in United States or Canadian territory as a result of the construction and maintenance

of the said causeway and for the satisfaction of any such claims as are valid.

- 10. This approval shall terminate:
 - (a) on the first day of June 1976, unless before that date, and before construction commences, the Applicant has informed the Commission in writing that it accepts all of the Conditions set forth herein;
 - (b) on the thirty-first day of December 1977 unless before that date construction of the said dyke has been substantially completed.

AND IT IS FURTHER ORDERED that the Commission retains jurisdiction over the subject matter of this Application and, after giving such notice and opportunity to all interested parties to make representations as the Commission deems appropriate, may make such further Order or Orders relating thereto as may be necessary in the judgement of the Commission.

Signed this 6th day of February 1976.

Henry P. Smith III

Charles R. Ross

Keith A. Henry

Bernard Beaupré

Victor L. Smith