

INTERNATIONAL JOINT COMMISSION

IN THE MATTER OF THE APPLICATION OF THE GOVERNMENT OF CANADA
FOR APPROVAL OF THE CONSTRUCTION AND OPERATION OF CERTAIN
REMEDIAL WORKS IN THE RICHELIEU RIVER, IN THE PROVINCE OF
QUEBEC, AND DOMINION OF CANADA.

ORDER OF APPROVAL

WHEREAS the Richelieu River is a river flowing from Lake
Champlain across the international boundary, within the meaning of
Article IV of the Treaty of January 11th, 1909; and

WHEREAS the Government of Canada has presented to and filed
with the International Joint Commission, appointed under the said
Treaty, an Application for permission to construct and operate
certain remedial works for the reclamation and protection of low lands
in St Johns, Iberville and Missisquoi Counties, in the Province of
Quebec, in the manner particularly set forth in the said Application,
and shown on plans referred to therein and numbered one to seven, and
on a general plan attached to the Application, all of which are filed
in the offices of the International Joint Commission in Ottawa, Canada,
and in Washington, D.C., in the United States of America; and

WHEREAS the watershed of the Richelieu River and Lake Champlain comprises a total area of some 8,990 square miles in the Province of Quebec and in the States of Vermont and New York, of which area 436 square miles are in Lake Champlain, seventeen square miles of the lake being in Canada and the remainder in the United States; and

WHEREAS the Richelieu River flows out of Lake Champlain across the international boundary and discharges into the St Lawrence River at Sorel, a distance of 81 miles, in which it descends about 80 feet; and

WHEREAS the question of carrying out remedial works in the Richelieu River, at or near the City of St Johns, Quebec, for the reclamation and protection of low lands in the Counties of St Johns, Iberville and Missisquoi, has been under consideration since 1887, but it was not until 1936 that the Parliament of Canada appropriated the sum of \$500,000 for this purpose; and

WHEREAS the project embodied in the Application entails the excavation and enlargement of the channel of the Richelieu River through a natural barrier or weir in the vicinity of St Johns, and, as a compensating feature, the construction of a control dam at Fryer's Island, the excavation to be carried from the present average crest elevation at the barrier of 91 down to elevation 79,

for a channel width of not less than 400 feet and extending over a distance of approximately 12,600 feet, and the construction of a control dam, approximately five and a half miles downstream from the lower end of the excavation, with a sill elevation of 83 and thirty-one sluiceways, each 30 feet wide, the opening in each sluiceway to be controlled by electrically-operated steel sluice-gates of the Stoney type, providing a minimum vertical opening of 11 feet, a discharge capacity adequate to cope with any possible flood conditions; and

WHEREAS the said Application came on for hearing in the City of St Albans, in the State of Vermont, and in the City of Montreal in the Province of Quebec, on the 9th and 10th days of June, 1937, respectively, after due notice to all parties interested, both in the United States and in Canada, of the filing of the Application and of the time and place of hearings, when evidence was adduced and all parties so desiring were heard, including counsel for the Government of Canada and the Government of the United States of America; and

WHEREAS Counsel for the Government of Canada and for the Government of the United States of America announced to the Commission that, after consultation with the engineers representing both countries

as well as the Province of Quebec and the States of Vermont and New York, it had been agreed that there was no objection to the Application being approved, provided suitable provision was made in the Commission's Order for the protection of navigation and other interests on Lake Champlain, as indicated in a memorandum submitted by said Counsel; and

WHEREAS this Commission, acting under authority conferred upon it by the said Treaty, after reading the Application, the Statements in Response filed on behalf of the Montreal Light, Heat and Power Consolidated, the Canadian Pacific Railway Company, the Canadian National Railways, the Central Vermont Railway, Inc., the Rutland Railroad Company, and Arnold G. Chapman, Manager of the New York State Waterways Association, and the Briefs filed on behalf of the Government of Canada and the Department of Public Works of Canada, and after having heard the evidence adduced, and what was alleged by parties appearing before the Commission desiring to be heard, including Counsel for the Government of Canada and for the Government of the United States of America, and having considered the matters above recited, and all other matters brought to their attention, have determined that the works provided for in the said Application

and plans should be approved, and authority given for the construction thereof pursuant to the said Treaty, and subject to the conditions and regulations hereinafter particularly set forth:

NOW THEREFORE THIS COMMISSION DOETH ORDER AND DIRECT:

1. That the said Application, a copy of which is hereto annexed, and the plans for the said works, copies of which are deposited in the offices of the Commission in Ottawa and Washington, be and the same are hereby approved, and the construction and operation of the said works, in accordance with the Application and plans, authorized, under the provisions of the said Treaty, upon and subject to the conditions and regulations hereinafter set forth, namely:-

(1) For the purpose of control of the level of Lake Champlain, the lake level shall be measured, unaffected by wind, on a staff gauge at Fort Montgomery, New York. Zero on the staff shall be at elevation 92.5 feet above mean sea level, referred to the Engineer Bench Mark "B", which is the level of the base course of the scarp wall at the left re-entrant angle of Bastion B at the outer end of the lake postern of the Fort.

The elevation of this bench, as given by the United States Coast and Geodetic Survey on page 550, Appendix 3, of the report of 1903 entitled "Precise Levelling in the United States", is 94.0 feet above mean sea level.

(2) Except as noted below, during the navigation season the lake level shall be maintained between an upper limit of elevation 95.0 and a lower limit of elevation 92.5. During the remainder of the year, the level may drop to elevation 92.0.

(3) Except as provided in paragraphs 4 and 5, when the lake level is between elevation 95.0 and 93.0 during the navigation season, and between elevations 95.0 and 92.5 during the remainder of the year, the flow through the dam across the Richelieu River at Fryer's Island shall be at a rate not to exceed 5,000 cubic feet per second, and when the lake level rises above elevation 95.0 the flow through the dam shall be increased to hold the lake level at that elevation, insofar as possible, up to the discharge capacity of the river and dam, and when the lake level falls to elevation 93.0 during the navigation season or to elevation 92.5 during the

remainder of the year, the rate of flow through the dam shall be so regulated as to assure holding the lake level above elevation 92.5 during the navigation season and above elevation 93.0 during the remainder of the year.

(4) During the months of December, January and February of each winter, the flow through the dam shall be so regulated as to lower the lake level, if possible, to elevation 94.0 by January 1st, elevation 93.5 by February 1st, and elevation 93.0 by March 1st.

(5) Subsequent to March 1st, if necessary to maintain the lake level between elevations 93.0 and 95.0 until after the ice breakup in the Richelieu River, the flow through the dam may vary between 5,000 cubic feet per second and 15,000 cubic feet per second provided that should the lake level rise above elevation 95.0 during this period, the flow through the dam shall be increased from that date by daily increments of not less than 5,000 cubic feet per second, with an initial flow of 15,000 cubic feet per second, until the flow reaches the discharge capacity of the river and dam; and provided further that as soon as the river is clear of ice, regulation of the flow through the

dam shall be as described in paragraph (3).

(6) Under any circumstances, whenever the lake level drops to elevation 92.5 during the navigation season, or to elevation 92.0 in the non-navigation season, the flow through the dam shall be diminished to such an extent as to maintain the lake level at these minimum elevations.

(7) A monthly tabulation of the daily readings of the level of Lake Champlain and of the daily discharge records through the dam at Fryer's Island shall be compiled as soon as practicable after the first of each month, for the preceding month, and made available to the joint board of engineers hereinafter constituted and for public inspection at the offices of the International Joint Commission in Ottawa and Washington.

(8) The natural barrier at St Johns, Quebec, shall not be removed until the dam at Fryer's Island has been constructed in accordance with plans approved by the joint board of engineers.

(9) In order to ensure the carrying out of the provisions of this Order, insofar as they relate to the construction of the said dam and to the regulation of the levels of Lake Champlain, the International Joint Commission shall retain jurisdiction over the construction and operation of the dam at Fryer's Island,

through an engineering board to be known as the Richelieu River Board of Control, and to consist of one or more members designated by the Government of Canada, and through a joint board of engineers to be known as the International Lake Champlain Board of Control, and to consist of one member to be designated by the Government of the United States and one member designated by the Government of Canada. The Richelieu River Board of Control shall have jurisdiction over the operation of the dam at Fryer's Island, and the International Lake Champlain Board of Control shall be charged with the responsibility of ensuring compliance with the provisions of this Order insofar as they relate to the regulation of the levels of Lake Champlain, and to that end may give such instructions from time to time to the Richelieu River Board of Control as may appear necessary. The International Lake Champlain Board of Control shall report from time to time to the International Joint Commission; and in the event of any disagreement between the members of the International Board the matter shall be referred by the Board to the International Joint Commission for decision; and the International Board may at any time make representations to

the International Joint Commission in regard to any matter affecting or arising out of the terms of this Order.

2. That either the Government of the United States of America or the Government of Canada may apply to the International Joint Commission, at any time, for revision or modification of any of the foregoing conditions and regulations.

Dated at the City of Montreal, this tenth day of June, 1937.

Chas Stewart
 A. O. L. L. L.
 H. H. H. H.
 John H. Bartlett
 Geo. W. Kite
 Eugene Lorton