water is required for flushing ice above the Falls or through the rapids below the Falls. No diversion of the amounts of water, specified in this Article to flow over the Falls, shall be made for power purposes between the Falls and Lake Ontario.

ARTICLE V

All water specified in Article III of this Treaty in excess of water reserved for scenic purposes in Article IV may be diverted for power purposes.

ARTICLE VI

The waters made available for power purposes by the provisions of this Treaty shall be divided equally between the United States of America and Canada.

International Niagara Falls Engineering Board.

Upon receipt of the Reference the Commission created the International Niagara Falls Engineering Board, composed of Engineers drawn from the technical agencies of Canada and the United States, and directed it to make the necessary investigation of the Niagara Falls and River, and thereafter prepare a report setting forth the Board's findings and recommendations. The Board was directed to include in its report preliminary designs of the recommended remedial works, an estimate of the cost of such works and recommendations concerning the allocation of tasks of construction of the remedial works as between Canada and the United States. The Board's report, dated 1 March 1953, is attached hereto and constitutes a part of the Commission's report to the two Governments.

Description of the Niagara Falls Area

The Niagara River, about 36 miles in length, connects Lake Eric and Lake Ontario. The river carries the outflow from the four upper lakes of the Great Lakes system averaging about 200,000 cubic feet per second. The fall from lake to lake is 326 feet, about half of which is concentrated at Niagara Falls, 21.6 miles below the head of the River.

In the 1-mile reach immediately above the Falls, the river drops about 50 feet through cascades and rapids. Goat Island divides the river into two parts, the larger leading to the Horseshoe Falls on the Canadian side and the smaller to the American Falls.

The distance from shore to shore at Horseshoe Falls in 1200 feet but the total length of crest around the "horseshoe" is 2500 feet. The central portion of the crest has been receding faster than the flanks, with the result that in the last 100 years the crest length has increased about 100 feet. The depth of water flowing over the crest near each shore is less than one foot and this portion of the falling sheet of water usually appears white. Toward the center of the Horseshoe the crest depth increases to a maximum of 12 feet and the falling sheet of water has a darker, greenish appearance.

The American Falls has a relatively low flow distributed quite evenly along its 1100 feet of crest and has receded very slowly as compared with the Horseshoe Falls.