

as compared with the ruling dimension of 30 feet depth, 800 feet length and 80 feet width which will exist eventually on the Upper Lakes and the somewhat greater minimum depth which is now available from Montreal to the sea.

This short section of the St. Lawrence River is only passable by small ships of the 2,000 ton class and thus presents a barrier to the commerce and trade of the basin which either prevents its development or at least requires the expensive and time-consuming process of trans-shipment once, and sometimes twice, thus creating a burden which has long been felt to be intolerable, more particularly as the effort needed to overcome it cannot be regarded with present day facilities for construction, as anything which is really of any very great magnitude.

The latest estimates of costs under the 1941 agreement between the United States and Canada for new works give the total cost as \$704 million; Canada's share is given as \$220 million, principally to provide the navigation facilities in the Lachine section. The total to be spent by the United States is put as \$484 million, which it is said would substantially equalize the costs incurred, or to be incurred, by the two countries in this undertaking of mutual advantage to provide a seaway up the St. Lawrence and into Lake Superior at the head of the Great Lakes. For these capital expenditures we would obtain the full benefit of 27 feet depth for navigation from Montreal to Lake Ontario, thus eliminating the troublesome and very expensive and time-consuming bottle necks which now hamper existing traffic, and which would be particularly disadvantageous in the inward movement of iron ore, which is about to become very important in our defence arrangements. These expenditures also include the funds required to deepen the Welland Ship Canal and the channels from Lake Erie through to Lake Superior to provide for 27 foot navigation.

In addition to thus freeing navigation, the expenditures I have mentioned would provide for the construction of the dams and the complete installation of turbines, generators, and power house equipment to develop 1.1 million horsepower on the United States side and a somewhat larger amount on the Canadian side at the Long Sault Rapids on the International Section of the river. As I have indicated, the unit cost for power to be derived from these installations is very low, probably about half of what the equivalent cost would be for steam plants, assuming steam plants of this capacity could be built at this time and kept supplied with fuel.

In the evidence which has been presented during the last year before the United States Congress and elsewhere, it has been made clear that the United States half-share of the power to be developed in the International Section would only represent about the annual increment of load in the area to be served. As regards the Ontario share, we know from the statements made by Mr. Saunders, Chairman of the OHEPC, that it could be absorbed more quickly than it could be produced, even having regard to the large increment which will be available from Niagara.