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THE ST. LAWRENCE SEAWAY AND POWER PROJECT

A 400-year-old dream was realized when, in April 1959, ships began using the St. Lawrence Seaway. The Seaway in the broadest sense is a deep waterway extending some 2300 miles from the Atlantic Ocean to the head of the Great Lakes at the heart of North America; strictly speaking, however, within the meaning of the legislation which permitted construction to get under way, the St. Lawrence Seaway extends from Montreal Harbour to Lake Erie and includes the Welland Canal.

In the early part of the sixteenth century, the French explorer, Jacques Cartier, was turned back by the rushing waters of the Lachine Rapids just west of what is now Montreal and was thereby forced to abandon his dream of finding the Northwest Passage and the route to the rich and glamorous East. At various times during the intervening 300-odd years, canals have been dug and locks built around the natural barriers to navigation in the St. Lawrence River and in the waters connecting the Great Lakes. This activity was spurred on by the desire to make use of the economical water route which the waters of the Great Lakes Basin offered for the transportation of goods in and out of this important area of the continent. The first such canals were built in 1783, but were only two feet deep. By 1850, 9-foot canals had been completed in Canada right through to the Upper Lakes. By 1900, 14 feet was the regulation depth in these canals, though certain of them -- Sault Ste. Marie, for example -- were deeper. In 1932, Canada completed the Welland Canal, 27 miles in length with a depth of 25 feet in some reaches. This canal and its eight locks overcome the differences in level of 326 feet between Lake Ontario and Lake Erie. Its construction may be considered as the first step, and a decisive one, in the construction of the present Seaway.

The needs of commerce pointed to the desirability of providing even greater depths in the St. Lawrence canals, locks and connecting channels and, by 1959, as a result of the joint efforts of the Canadian St. Lawrence Seaway Authority and the United States Saint Lawrence Seaway Development Corporation, 27-foot depths were available from Montreal to Lake Erie. The improvements to the Welland Canal between Lake Ontario and Lake Erie round the barrier of Niagara Falls have been the sole responsibility of the St. Lawrence Seaway Authority. Deepening the channels above Lake Erie to Seaway standards was done by others, and now 27-foot depths are available into the Upper Lakes.

While the Seaway development was in progress, the Hydro-Electric Power Commission of Ontario (HEPCO) and the Power Authority of the State of New York (PASNY) completed works in the International Rapids Section of the St. Lawrence to convert into electricity the energy that once expended itself by tumbling through the rapids west of Cornwall. The Barnhart Island-Cornwall generating plants produce 840,000 kw in each country.