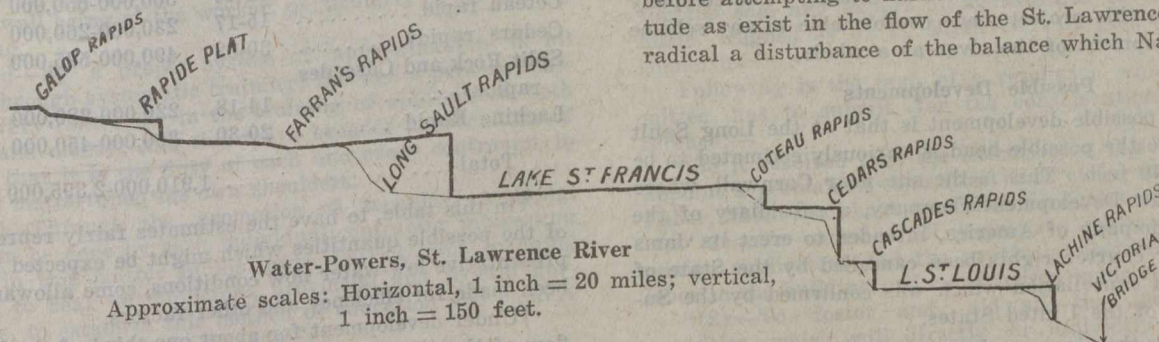


Now, although the construction of the works referred to was, in the judgment of many, a violation of the spirit and terms of the treaty, the company, nevertheless, aided by their representations respecting the allies' war necessity, were able to obtain a permit to construct this dam and to have it remain in place for five years or for the term of the duration of the war, whichever term should be the longer. You will notice it was not specified which term should be the shorter. At the time of Hearing before the International Joint Commission the solicitor-general of Canada, the Hon. Hugh Guthrie, on behalf of the Government of Canada made a special, solemn and very able protest against the granting of the permit except under conditions which he outlined, and which, while meeting temporary needs, would fully preserve the integrity of what he contended to be Canada's rights under the Webster-Ashburton Treaty.

From the foregoing illustrations it will be evident how necessary it is for our leading public men, especially those in Parliament, to have a good understanding of Canada's natural heritage in boundary waters and of means which must be taken properly to conserve this heritage for the benefit of her citizens.

Navigation of St. Lawrence River

We shall now consider, very briefly, some more concrete aspects of the subject which to-day has our chief attention: "Canada's heritage in the St. Lawrence River."



First, just a few words with respect to navigation. The St. Lawrence as the wonderful water highway from the Great Lakes to the sea has, as you know, been improved chiefly by the canal systems of the Government of Canada. The new Welland Canal is being constructed with locks of 30 feet draught. If it is to be used so that deep-draft, ocean-going vessels may go up to the head of navigation of the Great Lakes, then the St. Lawrence River in portions of its main channel will have to be canalized by means of a series of dams with suitable locks. If the river as a whole be canalized, obviously the water power of the river would be most economically developed by having the dams necessary for the navigation improvement made adaptable also for the development of water-power. One fact is certain, and that is, that, in order to conserve the integrity of the St. Lawrence River so that it may suitably be canalized—when the time comes for such work—its integrity must not be compromised by permitting the erection of structures in the main stream for piecemeal development of power, although this has already been done to some extent. Naturally, there is a great temptation for water-power companies to do on the St. Lawrence as has been done elsewhere, namely, to make the cheapest possible preliminary developments—skim the cream off the powers, so to speak—for by so doing interests may readily acquire markets, and vested rights, and often control of the general situation.

I shall not further refer to Canada's heritage in the navigability of the St. Lawrence. In a word, it may be summed

up that deep-craft navigation from the Great Lakes to the sea involves, absolutely, the treatment and canalization of the St. Lawrence River as a unit.

Water-Powers of St. Lawrence River

Coming next to the heritage of water-powers, I would remark first that the water-powers of the St. Lawrence River are, as yet, largely within the control of the people. The recent shortage of hydro-electric power which has been so keenly felt, both in Canada and the United States, has drawn increased attention to the enormously advantageous powers in and adjacent to International Boundary waters. Most of the water-powers which are more readily capable of economic development in Canada as well as in the United States either have already been developed or are privately controlled. Concentration of ownership is a noticeable feature of this control. Canada cannot afford to have her St. Lawrence River powers pass into the hands of powerful private interests.

Some Governing Factors

With respect to development of these water-powers, there are some very important points upon which I must just comment, such as ice conditions, the exportation of Canada's share of electrical energy and the character of the agencies utilizing the power.

Respecting Ice.—Power development on the St. Lawrence River cannot properly be considered apart from the subject of the ice menace. Too great caution cannot be exercised before attempting to harness natural forces of such magnitude as exist in the flow of the St. Lawrence River. Too radical a disturbance of the balance which Nature seeks to

maintain may cause disaster, hence it is well to emphasize this phase of the problem, for it involves the weighing of basic physical factors of paramount importance.

Respecting character of consumption of power.—Where very large developments of power take place it is, as you know, usually necessary to have some industries, such as the electro-chemicals, take large blocks of power. These industries require cheap power. As the demand for power increases for municipal and small manufacturing purposes the experience has been that the demands for power for such uses become so urgent, and the inducements by way of price so attractive to the vendors of such power, that large industries which were attracted by the cheap power have been compelled to go farther afield. A block of power—over 65,000 h.p.—such as is exported from the Cedars plant in Quebec to the Aluminum Works at Messena, N.Y., would be sufficient, speaking on a broad basis, to supply light and power to some 35 manufacturing cities of 10,000 inhabitants each. It will be apparent from a comparison of the benefits resulting from power thus widely distributed and the localized benefits from the same power utilized in bulk, as in electro-chemical industries, that the former contributes in a much greater degree to the upbuilding of communities and to the growth of the country at large. This feature should not be lost sight of.

Respecting the Exportation of Electrical Energy.—There is strong opposition, especially throughout Ontario, to any