RAILWAYS, CANALS AND TELEGRAPH LINES

plant, but today we are coming to the point that not only can we not buy the power we need from the Shawinigan Water and Power Company but they are looking to us to sell them power. The whole area is developing, and the same thing will be true of British Columbia. That is characteristic of the whole of the development we made during the wartime, and it was because of the availability of cheaper power that we moved our major operation to the Saguenay, hoping that additional power would be developed at a cost we could afford.

Hon. Mr. CHEVRIER: What is the position now regarding Massena and Niagara Falls?

The WITNESS: Massena, New York, of course is a plant which was built there many years ago and an additional plant was put there by the United States government during the war, but is now owned by Alcoa. For many years they contracted for power from the Cedar Rapids development of the Montreal Light, Heat & Power, from which point they built a transmission line and transmitted power to Massena. I think it was something of the order of 70,000 horsepower.

Hon. Mr. CHEVRIER: That is what I understand.

The WITNESS: Well, they have a long term contract and it is, I would say, a very good contract today. They also develop their own power. It seems that they have a power plant there and built a new power unit, tapping the St. Lawrence at the Long Sault Rapids and discharging into the Grasse River, developing about 70,000 horsepower, so that altogether today they have something of the order of 140,000 or 150,000 horsepower. That is not enough because of the expanded facilities during the war; so a transmission line was built in from central New York tapping the central grid, and today they are using some of that power at a very high cost which, I believe, is being subsidized. But as and when the Seaway goes through and there is more power developed above Cornwall at the International Rapids, no doubt they will be wanting to get some of that power, and they will probably hope to get it at a price which will make it more economical. But there are facilities to produce aluminum there in excess of the power which is presently available at Massena.

Mr. GREEN: To what extent will your raw materials be imported? I understand that alumina is being brought in from the Caribbean. What about the other raw materials required? Are you going to be able to get any of them from British Columbia or from other parts of Canada? What are the sources?

The WITNESS: I will try to give you the picture. In the production of aluminum the principal raw material is alumina, the oxide of aluminum, and that will be shipped from Jamaica. We are building a plant to produce it in Jamaica now, and rather than ship the bauxite from Jamaica, from which alumina is made, we prefer to ship the alumina which requires about half the tonnage of bauxite.

Hon. Mr. CHEVRIER: How will it get up there?

The WITNESS: By boat, of course.

Hon. Mr. CHEVRIER: Via the Panama Canal?

The WITNESS: Yes, via the Panama Canal. And in an emergency—that matter has been brought up before—suppose we had a war emergency where you could not ship to advantage. We point out that the alumina could be shipped from Jamaica to, let us say, New Orleans, and from there railed through the central United States into Canada; therefore this railway connection would be, of course, extremely important in such a case. As a matter of defence, the railway connection is vital.

Of the other raw materials, the principal one is coke for making the electrodes; that is, petroleum coke; and it has to be a very pure material, a very pure form of carbon; and while from the outset we will probably bring