

## Section 2.—The Central Electric Station Industry in Canada

**Government Control of Power in Wartime.\***—All previous Canadian records for the installation of new electric power facilities for the production of electricity were surpassed in 1943 and Canada now ranks among the nations of the world as probably the greatest per capita consumer of electricity. This newly achieved position results not merely from the record capacity increase of 1942, but from the total wartime increase amounting to 2,000,000 h.p.

Because a majority of the large wartime industries are located within the borders of Ontario and Quebec, most power problems have obtained in those provinces.

Less than a year after Canada declared war, shortages of electricity in Ontario and of adequate capacity in Quebec loomed as probabilities. In August, 1940, the Department of Munitions and Supply, appointed a Power Controller.

The Control began a study of the power capacities and loads, both actual and potential, in each of the provinces. Provincial organizations in charge of power were consulted, their co-operation obtained and these organizations became the agents of the Control.

The first major conservation move was an Order in Council passed on Sept. 20, 1940, making daylight saving applicable all year round in those municipalities in Ontario and Quebec which had advanced their clocks during the summer of that year. More than two years later, on Jan. 26, 1942, the Order in Council was amended to extend daylight saving throughout the whole of Canada.

By arrangement, all use of electricity for space heating and to produce steam, was banned in the autumn of 1940, and in various localities control devices were installed on domestic water heaters so that the power would be shut off during peak hours. Thus secondary power was made available for immediate use in primary loads. At that time small surpluses of power were available in all the provinces, except Alberta, where it was necessary to provide a block for a large electro-chemical munitions industry. The problem was chiefly one of adequate water storage, which was solved by the construction of storage facilities at Lake Minnewanka and the erection of a power plant just below that site.

The peak requirements of the winter of 1940-41 were met without the need for further restrictions, but it was evident that, with war industry expanding rapidly, measures would have to be taken to provide large blocks of power if an alarming shortage were to be avoided in the winter of 1941-42. In conference with the provincial authorities, the power companies, the Ontario Hydro-Electric Power Commission, and the Quebec Streams Commission, it was decided to embark on certain large-scale projects.

These projects included the inter-connection of the power systems; the erection of an underground circuit across Montreal; the building of a new transmission line from Three Rivers to Quebec; the construction of additional storage dams; the diversion of more water for the Niagara plants; and the building of new units and new power stations in Quebec and Ontario.

At the same time the Co-ordinator of Production of the Department of Munitions and Supply was advised that no further arrangements should be made for war-industry expansion without prior consultation with the Power Control. This was

\* Checked by the Publicity Division, Department of Munitions and Supply.