The figures of turbine installation given above must not be placed in direct comparison with those of the annual central electric station census nor those of the census of the pulp and paper industry because of the different bases of compilation. The figures of hydraulic installation represent the cumulative totals of installation for the purposes named, adjusted by deducting the capacity of installations removed because of obsolescence or for other reasons. The Census of Industry data are computed on a different basis, representing only the sum of the installation in the plants actually in operation during the year dealt with at the census and not total installation. Also, data on installations are available as soon as equipment is installed, whereas census data are not available until some time after the end of the period.

Section 2.—The Central Electric Station Industry in Canada

Government Control of Power in War-time.*—The ever-expanding requirements of Canadian industry for power in the production of the vital munitions of war have placed a tremendous strain on the Dominion's available hydro-electric power. During 1941 the output of firm power (i.e., power that must be available as and when required by the consumer) for operating machinery, lighting, etc., increased to 29,100,000,000 kwh. from 23,900,000,000 kwh. in 1940, or by 22 p.c.; secondary power delivered in off-peak periods dropped from 6,200,000,000 kwh. in 1940 to 4,300,000,000 kwh. in 1941. To alleviate the resulting strain as much as possible, a Power Controller was appointed in August, 1940, with jurisdiction extending over "hydraulic, electrical, steam, gas or other power". Subsequently, a number of measures were effected with a view to conservation and control. Some of the more important of these are described briefly in the following paragraphs.

In September, 1940, daylight saving was made applicable all the year round in the Provinces of Ontario and Quebec for those communities that had observed daylight saving in the summer of 1940. Subsequently, daylight saving throughout Canada was effected as from Feb. 9, 1942.

All use of electric power for steam purposes has been banned and coal-burning boiler installations made. In certain sections, some non-war industries have been obliged to reduce takings of power during peak hours, while in the central areas all power systems have been inter-connected so as to permit excess power in one part of the country to be used in other areas where there is a deficiency. Rural power extensions and installations into areas not already served have been banned by the Power Controller. A special power conduit has been built across Montreal permitting power generated from the St. Lawrence River, which cannot be held back, to be transmitted from 12 o'clock midnight to 6 a.m., as well as during other hours in the summer, to the interior areas that are served by rivers whose flows are regulated by control dams, thus enabling these areas to use a larger proportion of the power from the rivers that are not controlled.

Summary of Energy Generated by Type of Station, 1940.—Central electric stations are companies, municipalities or individuals selling or distributing electric energy, whether generated by themselves or purchased for resale. Stations classed as non-generating ordinarily purchase all the power they use: however, some of them have generating plants held in reserve. This results in the anomaly that, although classed as non-generating, such stations actually did generate 9,068,000 kwh. in 1940.

*Compiled from material furnished by the Department of Munitions and Supply.