The Northwest Territories and Yukon Territory.—The Northern Canada Power Commission was created by Act of Parliament in 1948 to bring electric power to points in the Northwest Territories where a need developed and where power could be provided on a self-sustaining basis. By legislation passed in 1950 the Act was extended to include Yukon Territory. The name of the Commission, formerly Northwest Territories Power Commission, was changed in 1956.

The Northern Canada Power Commission has authority to construct and operate power plants as required in a territory having an area of over 1,500,000 sq. miles. The Commission is continually investigating power needs in this large area and studying reports on hydro-electric power sites.

The Commission has a hydro-electric power development in operation on the Snare River about 94 miles northwest of Yellowknife, N.W.T., from which power has been supplied to the mines in the Yellowknife area since the autumn of 1948. In the summer of 1949 a transmission line connection was completed to augment the supply of power to the town of Yellowknife.

A diesel generating station and distribution system was put into operation at Fort Smith, N.W.T., in October 1950, and at Fort Simpson in October 1956. These projects supply the various Government establishments such as the Departments of Northern Affairs and National Resources, Transport, National Defence (RCCS), Health and Welfare, and Public Works as well as the Royal Canadian Mounted Police and private commercial consumers and residents of the settlements.

A hydro-electric development on the Mayo River approximately six miles north of Mayo Landing, Y.T., completed in December 1952, delivers power to the mining developments in that area and to the settlement of Mayo Landing. Current construction is outlined at p. 568.

Section 3.—Total Development of Electric Power from All Sources

In Section 1 of this Chapter, water power resources are given with the proportion that so far has been developed. Table 3 of that Section analyzes the hydraulic turbine installation by the proportions in central electric stations, in pulp and paper mills and in other industries. This is useful but does not take into account electric power developed in central electric stations or in other industries from sources other than hydraulic.

Section 2 covers the central electric station industry including stations under public ownership (provincial and municipal governments) and those under private ownership. Neither of these Sections, however, gives a complete presentation of the total electric power developed in Canada. All the hydraulic energy developed is not converted to electric power: there are a number of water wheels and water turbines used for direct drive that are not geared to electric generators. On the other hand certain central electric stations in the Atlantic Provinces, Ontario and the Prairie Provinces generate electricity from steam or internal combustion engines. It is the purpose of this Section to show the total electric power generated from all available sources. Most of the power comes, of course, from central electric stations, the figures having been given in Table 4 of Section 2, p. 568. The total kilowatt hours of electric power generated by central electric stations, is divided into that generated from water power and that generated from thermal engines of all kinds.

Table 25 shows that total electric power generated by central electric stations in 1955 was 72,910,592,000 kwh. For a complete presentation, the power generated by manufacturing industries for their own use and the power generated by the primary mining industry for use in its own operations must be added. There are a few other sources of electric energy included such as electric railways which produced 8,463,000 kwh. in 1955. This production has been taken into the annual total shown in Table 25. There are