

Central electric station classification totalling 16,028,424 h.p. represents 87 p.c. of the total developed water power as at Dec. 31, 1956. Central hydro-electric stations produced 96 p.c. of all electricity sold in or exported from Canada during the year. The pulp and paper turbine installation total of 931,630 h.p. includes only water power actually developed and directly used by pulp and paper companies. In addition, this industry is the greatest purchaser of central electric station power, buying nearly 15 p.c. of all power sold for industrial purposes in 1956. Part of the purchased power is classed as secondary, being used for steam generation by electric boilers.

The 'other industries' group developed 1,396,094 h.p. solely for its own use. These diversified industries also provide a broad market for the power sold by the central electric stations, as the amount of power produced by these industries represents only a part of the power they use.

The figure of total hydraulic installation in Canada (18,356,148 h.p.) is the cumulative total of all existing installations of water wheels and hydraulic turbines irrespective of whether or not the equipment has been in use during the year. It has been adjusted to Dec. 31, 1956, by the inclusion of new installations completed during the year and by deletion of those old units which were dismantled.

Subsection 2.—Water Power Developments in the Provinces and Territories, 1955 and 1956

During 1955 and 1956, the appreciable amounts of 827,000 h.p. and 845,000 h.p., respectively, of new hydro-electric capacity were installed in Canada. Although considerably lower than the record amount of 1,758,000 h.p. which was brought into service during 1954, these quantities represent closely the average annual rate of development since 1947. Construction of hydro-electric plants was accelerating during 1956 with about 3,500,000 h.p. of new capacity expected to come into operation during 1957 and 1958 and an additional 4,500,000 h.p. under preliminary construction or planning for later years. Construction was active also in the field of power distribution and in the building of thermal-electric plants. Progress in each province and in Yukon Territory, pertaining principally to hydro-electric developments, but also covering thermal developments, is outlined below.

Atlantic Provinces.—In *Newfoundland* during 1955 the Union Electric Light and Power Company Limited completed the installation of a 2,000-h.p. turbine on the Trinity River near Trinity with the addition of a second similar unit under active prospect. The Company extended transmission facilities by completing 81 miles of 46-kv. line in 1955 and 1956; construction of 20 miles of 13.8-kv. line was started. By a replacement of the turbine runners, the Anglo-Newfoundland Development Company Limited increased from 60,000 h.p. to 64,000 h.p. the capacity of its plant at Grand Falls on the Exploits River. The United Towns Electric Company Limited completed, in December 1956, the installation of a single 5,600-h.p. unit on New Chelsea Brook at New Chelsea. Extensions to its transmission lines included the completion of 33 miles of 66-kv. line and 31 miles of 13.8-kv. line during 1955 and 1956. The Newfoundland Light and Power Company Limited has under active prospect the construction of two plants on Rattling Brook near Norris Arm, the first to develop an estimated 13,000 h.p. and the second about 31,000 h.p. On the Corner Brook River at Corner Brook, the Bowater Power Company Limited is constructing a development of 12,000 h.p. in two units for operation in 1957. The Maritime Mining Corporation expects to complete, early in 1957, a 500-h.p. plant on Venams Brook at Green Bay and, at a later date, an 850-h.p. plant at Snooks Arm, Green Bay.

In the field of thermal plant construction, the Newfoundland Light and Power Company completed, in 1956, the installation of the initial unit of 10,000 kw. in its St. John's steam plant with a second unit of 20,000 kw. under active prospect for operation in 1959; the Bowater Power Company Limited completed the construction of a 6,600-kw. steam plant in one unit at Corner Brook for use as a stand-by.