

While commercial, street lighting, and household services play subordinate roles as far as the amount of power used is concerned, the low cost of these services has been important in the development of urban centres. Public authorities have found it desirable to encourage rural electrification by government aid, and this has been done in Ontario through the Hydro-Electric Power Commission, in Manitoba through the Manitoba Power Commission, and in Quebec under recent legislation passed on the recommendation of the Lapointe Commission.

In 1938 central electric stations engaged in the public sale of energy controlled 88 p.c. of all developed water powers, as compared with 70 p.c. in 1922. The energy they supply drives 84 p.c. of the electric motors and 66 p.c. of all the power equipment used in manufacturing industries. The total amount of capital invested in central electric stations was greater than that invested in any other manufacturing industry, while in wages and salaries paid they ranked second in total value. The net value of their output in 1938 was greater than that of any other industry and in gross value they ranked second only to the pulp and paper industry. Almost the whole, or 98 p.c., of the output was hydro-electric power while 95.7 p.c. of the primary power equipment of these stations was hydraulic.

Included in the statistics of central electric stations are those of a few stations engaged primarily in other industries, such as mining, manufacturing of pulp and paper, etc., which sell surplus power. For such plants, the statistics pertaining to the central electric station phase of the industry only have been given as far as possible.

Subsection 1.—Historical and General Statistics.

The growth of the central electric stations industry, has been almost continuous since 1919, when statistics of kilowatt hours generated were first made available. The depression that occurred in the early 1930's resulted in decreased output of power for several years but this proved to be a temporary condition and output has now recovered and is again increasing in the same manner as characterized the years immediately preceding 1930. The record amount of power generated in 1937, was over 500 p.c. greater than the amount generated in 1919 and 53 p.c. greater than 1930 figures.

The number of customers has increased each year since 1920, with the exception of 1933 and 1934 when small decreases were shown, the increase from 1920 to 1938 being over 110 p.c. Domestic service customers account for the large majority of customers and for over 80 p.c. of this increase. The domestic service consumption of electricity, however, is only around 8 p.c. of the total consumption in Canada.

The industry is one that is particularly suited to large-scale operation, because of the huge outlays of capital necessary and the length of time required to bring a large water-power project to completion. As the industry grew, stations tended to become larger in size; there are now three stations with capacities of over 500,000 h.p. and several with capacities of over 200,000 h.p. Capital invested and total horse-power installed increased each year from 1920 to 1937 even during the depression years, mainly because large power projects planned before the depression were in process of construction during the early years of 1930.

The number of persons employed and salaries and wages paid in central electric stations decreased considerably during the depression years. Figures since 1934 show improvement in each year, however, even though at a slower rate than shown by other statistics.