

steam reciprocating engines installed in central electric stations in 1921, only 22 in number or 12 p.c. were over 500 h.p., and the internal combustion engines averaged only 75 h.p. The steam turbines averaged over 2,100 h.p., with 4 units averaging 6,475 h.p., but there were only 43 steam turbines in the industry and these were confined to 22 stations, whereas the 604 water wheels and turbines averaged over 3,000 h.p.

The majority of the fuel using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the prairie provinces, lignite coal is used for the steam engines and gasoline, oil distillates and producer gas for the internal combustion engines.

Of the 203 internal combustion engines in central electric stations in 1921, 107 or over 50 p.c. were in Saskatchewan, 15 p.c. in Alberta and 7 p.c. in Manitoba.

During 1921 the fuel stations produced an aggregate of 166,550,000 kilowatt hours at a cost for fuel of \$2,550,437, or at an average of 1.53c. per kilowatt hour. This production was however, less than 3 p.c. of the total output, hydro-electric stations producing over 97 p.c. The auxiliary equipment in hydraulic stations consumed fuel valued at \$474,493, but no record is available of their output of current.

The distribution by provinces of the electric energy generated in central electric stations throughout Canada is shown in Table 7 for the calendar years 1919, 1920 and 1921. In the latter year nearly 82 p.c. of the total generated electric energy was produced in the leading industrial provinces of Ontario and Quebec. From Table 9 it is seen that the total of electric energy exported in the fiscal year ended 1922 was 861,574,793 kilowatt hours or about 15.3 p.c. of the amount produced in the calendar year 1921, the nearest corresponding period.

7.—Electrical Energy Generated in the calendar years 1919, 1920 and 1921, by Provinces.

| Provinces. | Kilowatt hours ("000" omitted). | | | Provinces. | Kilowatt hours ("000" omitted). | | |
|------------------|------------------------------------|-----------|-----------|-------------------|------------------------------------|------------------|------------------|
| | 1919. | 1920. | 1921. | | 1919. | 1920. | 1921. |
| Prince Edward I. | 849 | 1,075 | 1,271 | Saskatchewan. | 43,035 | 47,866 | 54,295 |
| Nova Scotia. | 35,088 | 33,731 | 34,330 | Alberta. | 86,381 | 114,101 | 115,580 |
| New Brunswick. | 18,341 | 25,632 | 30,351 | British Columbia. | 397,880 | 485,177 | 499,095 |
| Quebec. | 1,923,560 | 1,914,698 | 1,790,805 | Yukon. | 9,538 | 8,332 | 8,927 |
| Ontario. | 2,892,886 | 3,056,989 | 2,808,246 | Totals. | 5,497,204 | 5,894,732 | 5,614,132 |
| Manitoba. | 179,655 | 207,131 | 271,232 | | | | |

Electric Light and Power.—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the production of electrical energy for export is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until September 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. The statistics published in connection with these Acts are given in Tables 8 and 9. The number of electric light companies registered under the above-mentioned Act (see Table 8) has increased from 398 in 1910 to 1,096 in 1923, and the export of electric energy from 538,331,425 kilowatt hours in 1911 to 1,054,872,585 kilowatt hours in 1923.