

five local power supply installations formerly operated by the Northwest Territories government. At the close of the year, the Commission was responsible for electrical service in 45 separate communities throughout the North.

In the Yukon Territory, construction commenced on a 30-MW hydro plant on the Aishihik River to tie in with the present Whitehorse—Faro system. This plant is scheduled for service in late 1974.

In the Northwest Territories, investigation and preliminary engineering for a two-unit 14-MW hydro plant on the Snare River, a short distance downstream of the existing Snare Falls hydro plant, was undertaken. This plant, the third on the Snare River, is scheduled for construction in 1974-75 as a more economical alternative to diesel generation to supply load growth in the Yellowknife area.

13.7.9 Electric power statistics

Electric power statistics presented in this Section are based on reports of all electric utilities and all industrial establishments that generate energy, regardless of whether or not any is sold, and therefore show the total production and distribution of electric energy in Canada. Utilities are defined as companies, commissions, municipalities or individuals whose primary function is to sell most of the electric energy that they have either generated or purchased. Industrial establishments are defined as companies or individuals that generate electricity mainly for use in their own plants.

The current series of electric power statistics dates back to 1956. Earlier reports, entitled *Central electric stations*, were concerned solely with the electric utility industry and hence excluded statistics relating to power produced by industrial establishments for their own use, although power sold by such establishments was included. Figures appear in Tables 13.16 - 13.21.

Of the total power generation of 240,212.7 GWh in 1972, 74.9% was produced from hydraulic sources and 25.1% from thermal units. The proportions differed markedly from province to province, ranging from a high of 98.5% hydro and 1.5% thermal in Quebec to 100% thermal generation in Prince Edward Island. Newfoundland, with 96.8% hydro and 3.2% thermal, narrowly edged Manitoba with 95.0% and 5.0% and British Columbia with 92.9% and 7.1%, respectively. The territories produced 73.8% of their power needs from hydro sources and 26.2% from thermal units. Ontario with 55.0% hydro and 45.0% thermal and Saskatchewan with 46.3% hydro and 53.7% thermal were closest of all the provinces to a balance between the two forms of energy source. In decreasing proportion of use of hydraulic sources came New Brunswick with 47.3% against 52.7% thermal; Nova Scotia, 16.8% and 83.2%; and Alberta with 12.5% and 87.5%. More detailed information will be found in Table 13.16.

Table 13.17 gives summary figures of power production and distribution classified by province and Tables 13.18 and 13.19 give figures classified by type of production establishment. Total installed capacity in Canada amounted to 49,943.7 MW in 1972, an increase of 3,267.9 MW over 1971. Of the 1972 total, 44,562.4 MW were accounted for by utilities and the remainder by industrial establishments. During 1971 and 1972, total sales to ultimate customers amounted to 147,202.7 GWh and 162,729.4 GWh, respectively, of which 99.8% in both years was sold by utilities.

Sales to power customers, excluding sales to industrial establishments and generating facilities, made up 46.8% of the total in 1971 and 47.3% in 1972, sales to domestic and farm customers were 31.6% and 30.9%, respectively, and commercial sales 20.6% and 20.9%, respectively. Exports to the United States in 1972 amounted to 11,037.1 GWh, an increase of 3,716.1 GWh over 1971.

Average domestic and farm consumption rose from 7,488 kWh in 1971 to 7,814 kWh in 1972. Among the provinces, the averages in 1972 varied from a low of 4,753 kWh in Prince Edward Island to a high of 9,696 kWh in Manitoba. For domestic and farm customers across Canada the average annual bill was \$126.23 in 1972 as against \$120.48 in 1971. Although many utilities do not keep records on farm customers separate from other domestic customers, the data reported on farm service in Manitoba, Saskatchewan and Alberta indicate that the average consumption rose from 11,006 kWh per customer in 1971 to 11,630 kWh in 1972 and the average bill from \$189.40 to \$195.69. Table 13.20 provides more detailed information including the total number of customers served.