

scheduled for completion in the fall of 1976 and will supplant diesel generation now augmenting hydro supply to accommodate rapidly rising demand in the Yellowknife area.

13.5.9 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 generating 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 13.15 - 13.20.

Power generated in 1974 totalled 278,969 GWh — an increase of 6.4% from 1973 compared with one of 9.1% from 1972 to 1973. Approximately 75% of the total generation is by hydro, but the proportions of hydro and thermal differ markedly from province to province as indicated by 1974 ratios ranging from 99.7% hydro and 0.3% thermal in Quebec to 100% thermal in Prince Edward Island. Other predominantly hydro provinces are Newfoundland 98.6%, Manitoba 98.1% and British Columbia 94.9%. Hydro (50.2%) and thermal (49.8%) generation were virtually in balance in Ontario where nuclear generation contributed 33.7% of the thermal component and 16.8% of the province's total electrical energy production. In the remaining provinces hydro was overtaken by thermal, e.g. Saskatchewan 42.5/57.5%, Nova Scotia 13.8/86.2% and Alberta 12.1/87.9%. Hydro generation was predominant in the northern territories at 66% in the Yukon Territory and 77% in the Northwest Territories. Detailed figures are shown in Table 13.15.

Table 13.16 gives summary figures of power production and distribution classified by province or territory and Tables 13.17 and 13.18 give figures classified by type of production establishment. Installed capacity in Canada at the end of 1974 totalled 57,151 MW compared to 54,376.4 MW in 1973, and 49,929 MW in 1972. Of the 1973 total, 48,540.8 MW were accounted for by utilities and the remainder by industrial establishments. Exports to the United States in 1973 amounted to approximately 16,286 GWh, an increase of over 47% (5,249.0 GWh) over 1972, but declined to 15,298 GWh in 1974; net exports totalled 14,724 GWh in 1973 and declined by 12% to 12,956 GWh in 1974.

Average domestic and farm consumption rose from 7,814 kWh in 1972 to 8,170 kWh in 1973. For domestic and farm customers across Canada the average annual bill was \$137.21 in 1973 as against \$126.23 in 1972. Table 13.19 provides more detailed information including the total number of customers served.

In 1973 natural gas accounted for 19.4% of thermal generation by utilities, coal for 48.9%, petroleum fuels for 9.5% and nuclear fuel for 22.2%; corresponding proportions in 1972 were 15.7%, 62.0%, 10.0% and 12.3%, respectively. Details of the type of fuel used, by province, appear in Table 13.20.

Sources

13.1 - 13.5 Energy Development Sector, Department of Energy, Mines and Resources.