

Coal is an abundant resource in British Columbia, with large quantities of bituminous coal located in the province.

For the longer term, detailed studies are being made of lignite coal deposits at Hat Creek, 13 miles (21 km) west of Cache Creek, as a possible source of fuel for a large thermal electric generating station. This deposit is now estimated at 500 million tons (454 million tonnes) which could support a 2000-MW generating station, and more coal may well be located in areas surrounding the proven body.

Yukon Territory and Northwest Territories. The Northern Canada Power Commission, a Crown corporation established in 1948, is empowered to survey utility requirements, construct and operate public utility plants in the Northwest Territories, the Yukon Territory and, subject to the approval of the Governor in Council, elsewhere in Canada. Projects undertaken by the commission must be financially self-sustaining.

A preliminary evaluation of hydro-electric potential has been made for most of the major rivers in the Yukon Territory and in the central portion of the Mackenzie district of the Northwest Territories confirming the existence of substantial waterpower potential. The Yukon River and its tributaries contain some of the larger undeveloped hydro-electric resources in North America.

The Northern Canada Power Commission has hydro-electric power developments on the Yukon River near Whitehorse and on the Mayo River near Mayo in the Yukon Territory; in the Northwest Territories on the Snare River northwest of Yellowknife and on the Taltson River northeast of Fort Smith.

In the Yukon Territory the Northern Canada Power Commission commissioned its 30-MW Aishihik hydro development in September 1975. Plans were well advanced for a 20-MW addition to the Whitehorse Rapids hydro development and studies were carried on to select the best site for a major hydro development to meet future load growth on a long-term basis.

In the Northwest Territories, major additions in generating capacity between 1974-75 were confined to diesel installations which exceeded 10 MW in units ranging up to 2500 kW. Work continued on the 10-MW Snare Forks hydro development and a 4-MW addition to the 18-MW Taltson station, both scheduled for service in 1976, and planning was completed in respect to the 4-MW Snare Cascades development on the Snare River.

13.6.9 Electric power statistics

Electric power statistics 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.

Power generated in 1975 totalled 272 624 GWh (1 gigawatthour = 10^6 kWh) a decrease of 2.3% from 1974 compared with an increase of 6.4% from 1973 to 1974. Approximately 74% 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 98.9%, Manitoba 96.8% and British Columbia 90.5%. Hydro (49.0%) and thermal (51.0%) generation were virtually in balance in Ontario where nuclear generation contributed 29.6% of the thermal component and 15.1% of the province's total electrical energy production. In the remaining provinces hydro has been overtaken by thermal, e.g. Saskatchewan 38.3%/61.7%, Nova Scotia 11.4%/88.6% and Alberta 9.5%/90.5%. Hydro generation was predominant in the northern territories at 74% in the Yukon Territory and 76% in the Northwest Territories. Detailed figures are shown in Table 13.15.