The province of Quebec claims that by 1985 its energy requirements may reach 32 million kilowatts, compared to 12.6 million in 1972.

## Hydroelectric power in Canada

The history of the generation and transmission of hydroelectric power is a relatively short one, dating in Canada only from the last half of the nineteenth century.

In the 100 years that have passed, this source of energy has undergone a tremendous development. In fact, whereas in 1900 total installed hydro capacity in Canada was a mere 133,000 kilowatts, today it is over 200 times as large, a huge expansion considering the fact that population in the same period has increased only fourfold.

One of the greatest hurdles that stood in the way of widespread use of electricity was the problem of transmitting power from the often remote and inconvenient power sites to urban areas. This was partly solved in the first decade of this century by the use of high-tension transmission lines permitting electric power to flow over fairly long distances. However, the vast hydroelectric potential of Northern Canada, especially in Quebec, Labrador, Manitoba and British Columbia,

lay beyond the reach of high-tension transmission lines and, hence, was left undeveloped until the 1960s, when a technological breakthrough, the development of extra-high voltage (EHV) transmission, dramatically extended the distance over which electric power could be transmitted economically. This breakthrough, therefore, made available the power of Churchill Falls, the Nelson River, and now the James of Canada's urban and industrial centres.

The hydroelectric development of the area, which is 300 miles north of Montreal, with five large rivers, the Nottaway, Broadback, Rupert, Eastmain and La Grande, and more than 100,000 lakes, was divided into two regions and two phases; the first phase was the construction of the La Grande complex in the northern part of the region. The second phase would be in the south, harnessing the Rupert, Broadback and Nottaway Rivers, as well as the upper reaches of the Eastmain. After extensive studies of the hydroelectric potential of the two areas, it was decided that the La Grande sector would be the focal point of Quebec's power development for the next decade.

The whole project was scheduled for completion by 1980.

Bay complex, to meet the growing needs

First 1976 Olympic coins to be issued next month

The first commemorative coins for the 1976 Olympic Games in Montreal will be distributed at the beginning of December. This will be the initial minting in an over-all program of seven series of sterling silver Olympic coins.

Each series will consist of four coins, two of \$5 value and two of \$10, all with different designs.

The coins will be struck from sterling silver blanks (92.5 percent silver, 7.5 percent copper alloy).

Each \$5 coin will contain a fine silver content of 0.723 troy ounces; the \$10 coins will contain 1.44 troy ounces each.

All coins will be legal tender in Canada.

The sterling \$5 coin will be slightly larger than the old silver dollar, and will measure 38 mm in diameter. The \$10 commemorative pieces will be 45 mm in diameter.

Themes chosen for the 28-coin collection cover a wide range of Olympic sports and subjects. The initial fourcoin issue, in December, has a geographic theme, depicting: the map of the world; the map of North America; the Montreal skyline; and the skyline of Kingston, Ontario, where some of the water sports will be staged.

According to present plans, the issue dates and general themes of the six other issues, each to consist of two \$5 and two \$10 sterling coins, will be as follows:

The second series, to be issued in spring will feature Olympic symbols: the Olympic torch; the Olympic flame; a laurel wreath; and an olive branch.

The third series, probably to be issued next autumn will illustrate early Canadian sports; the fourth series, scheduled for spring 1975 will cover Olympic track and field sports; the fifth series, scheduled for autumn 1975 will illustrate Olympic water sports; and in early spring 1976, the sixth series will feature Olympic team and body contact sports.

The seventh series, a souvenir issue, is scheduled for June or July 1976. Olympic sites at Montreal and Kingston, possibly including an aerial view of the Olympic Stadium, will be the themes.

