electric stations and a number of isolated diesel plants with installed capacity totalling 2,970 MW at the end of 1974. These stations join the City of Winnipeg Hydro Electric System's Pointe du Bois and Slave Falls stations to form the Manitoba Integrated System.

Pine Falls, McArthur, Seven Sisters and Great Falls hydro stations are on the Winnipeg River approximately 70 miles northeast of Winnipeg; Grand Rapids hydro station is on the Saskatchewan River 285 miles northwest of Winnipeg; and Kelsey and Kettle Rapids hydro stations are 400 and 450 miles northeast of Winnipeg on the Nelson River. Responsibility for operation of the Sherritt Gordon Mines, Limited's Laurie River hydro stations 1 and 2 was assumed by Manitoba Hydro in May 1970.

The development of Nelson River hydro-electric potential is continuing. The final three of 12 units at the Kettle generating station were added to bring the total to 1,224 MW. Work is well advanced on the next site, at Long Spruce, with the first unit planned for operation late in 1977 and completion to a total of 980 MW by 1980. At the end of 1974 the powerhouse and spillway were more than 50% completed and installation of the diversion gates was to be finished in 1975. A third site on the Nelson River at Limestone Rapids, downstream from Long Spruce, is in the design and planning stage. Access roads and site clearing began in 1975.

Important regulation and channel improvement work is progressing on structures and channels forming the waterway from Lake Winnipeg into the Nelson River. As part of this project, the Jenpeg generating station, with six 28-MW units, will begin operation in mid-1976. Other work on the diversion route through the Rat–Burntwood river systems between the Churchill and Nelson rivers is under way, notably at the Missi Falls and Notigi Lake sites. The Missi Falls structure will regulate flow from Southern Indian Lake to the Churchill River. Notigi, at the outlet of Notigi Lake to the Rat River, will initially regulate flow but has provision for future generator installation.

The HVDC transmission system connecting the Nelson River generating sites to southern Manitoba is being expanded by the addition of converter capacity at the sending and receiving stations. Equipment has been placed on order to complete the first bipole to its planned rating of 1,620 MW at ±450 kV with a target completion date of late 1976. Planning is well advanced on a project to add converter equipment to form the second bipole which will raise the capacity of the HVDC system by 1,800 MW to a total of 3,420 MW. This addition is to be phased over 1978-1983 and will provide capability for the output of all three generating sites on the lower Nelson River.

Saskatchewan. The Saskatchewan Power Corporation was established in 1949 by the Power Corporation Act (RSS 1965, c.40, as amended) as a successor to the Saskatchewan Power Commission which had been in operation since 1929. The original functions of the Corporation included the generation, transmission and distribution, sale and supply of electric energy to make abundant electric power available throughout the province at reasonable rates. Since 1952, the Corporation has also been authorized to produce or purchase and to transmit, distribute, sell and supply natural or manufactured gas.

Generation expansion planned for 1975 provided for a 70-MW gas turbine at Landis, 75 miles northwest of Saskatoon. Provision is being made for an underground gas storage cavern to provide for winter peak operation without placing excessive demands on the gas system.

In 1977 an additional 300-MW unit at the Boundary Dam lignite fuelled thermal station will raise the total installed capacity to 882 MW. The next proposed addition is for a new lignite fuelled station to be known as Poplar River near Coronach in south central Saskatchewan with a tentative commissioning date of 1979 for the first 300-MW unit. Further development under consideration includes hydro sites at Wintego on the Churchill River and at Nipawin on the Saskatchewan River.

In 1974 some 57.5% of the electric energy was generated by thermal stations and the balance by hydro-electric stations.

Alberta. Electric power generation in Alberta is provided by two major investor-owned companies and three municipal utilities. In addition, a number of municipal systems handle local distribution of power purchased from the investor-owned utilities. Electrical utility companies previously known as Canadian Utilities Limited and Northland Utilities Limited were merged in 1972 to form Alberta Power Limited.