

township areas. In addition to administering the enterprise over which it has direct control, the Commission, under The Power Commission Act and The Public Utilities Act, exercises certain regulatory functions, particularly with respect to the group of municipal electric utilities it serves.

Ontario's total electric generating capacity rose to 17,704 MW at the end of 1973 with the bringing into service of 1,547.5 MW of thermal capacity. Similar large increases are expected to continue in future years with 1,100 MW of thermal (fossil-fuelled) capacity being forecast for 1974, while a total of 17,406 MW has been committed for 1975 and subsequent years. Of this total, 62.5% (11,560 MW) will be nuclear, 37% (6,843 MW) conventional (coal- and oil-fired) thermal, and 0.5% hydro (103 MW).

Purchased-power contracts increased in 1973 by 859 MW, with 800 MW purchased from Hydro-Québec and 50 MW from Manitoba Hydro. Primary peak requirements of Ontario Hydro increased to 13,606 MW, exceeding the 1972 peak by 6.8%.

Additions to Ontario Hydro's system in 1973 included the fourth 540-MW nuclear unit and the sixth 7.5-MW combustion turbine unit at the Pickering station on Lake Ontario. This station now has a total generating capacity of 2,205 MW, second only in size to the 2,430-MW Lakeview (coal-fired) station; however, another four 540-MW nuclear units at Pickering already approved will raise the installed capacity at this station to 4,365 MW (4,320 MW nuclear, 45 MW gas turbine). In 1973 the Pickering plant set a record for nuclear plants: over the year the four CANDU units achieved net capacity factors of 93%, 90%, 86% and 70%, and supplied a total of 14,278 GWh or about 18% of Ontario Hydro's primary energy requirements. Pickering's 1973 output was the equivalent of approximately 5.5 million tons of coal-fired generation.

The remaining capacity installed in 1973 was at Nanticoke, on Lake Erie, where the second and third 500-MW coal-fired units were brought on line. Nanticoke's ultimate capacity, totalling 4,000 MW, is scheduled for completion by 1977.

Other installations scheduled for service in 1974 and later include: eight 800-MW (nominal) nuclear units and four 12-MW gas turbine units at the Bruce station on Lake Huron; four 500-MW oil-fired units at Wesleyville; four 574-MW oil-fired units at the Lennox station on Lake Ontario; and a 3,000-MW (nominal) nuclear station at Bowmanville. The only hydro-electric projects currently scheduled for development in Ontario are a 78-MW plant at Arnprior on the Madawaska River, expected to be operational by 1976, and a 25-MW unit on the Great Lakes Power Company system at Andrews Falls in 1975.

In 1973 it was announced that Ontario intends to exercise its option to purchase the Nos. 1 and 2 units of the Bruce heavy water plant from Atomic Energy of Canada for \$253 million, and construct two additional units; four more such units are under consideration. These, in total, are intended to secure for Ontario Hydro an adequate supply of heavy water, essential to the massive program of nuclear generation that it has under commitment or consideration.

Manitoba. Manitoba Hydro is the primary agency responsible for the generation and distribution of electric power in the province. The corporation was formed April 1, 1961, merging The Manitoba Power Commission, the provincial distributing agency created in 1919 to serve rural Manitoba, and The Manitoba Hydro-Electric Board, the power generating and development authority established in 1951.

Manitoba Hydro serves over 250,000 consumers in some 700 communities throughout rural Manitoba and suburban Winnipeg. Electric energy transmitted over 39,300 miles of Manitoba Hydro line totalled 9,900 GWh in 1973. Manitoba Hydro operates nine hydro-electric stations, two thermal-electric stations and 26 isolated diesel plants with installed capacity totalling 2,235 MW. The nine hydro stations and two thermal stations, operated in conjunction with the City of Winnipeg Hydro Electric System's Pointe du Bois and Slave Falls stations, 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 Laurie River hydro stations 1 and 2 was assumed by Manitoba Hydro in May 1970. A power line 140 miles northwest from Thompson to Laurie River ensures that continuing growth in power requirements at Sherritt Gordon's