

around the Point Tupper station; smaller gas turbines will be used for security and peaking in more isolated areas.

The 43,000 kw of new generating capacity added during 1971 came from an 18,000-kw oil/wood-fired unit installed at the Port Hawkesbury station of Nova Scotia Forest Industries and from a 25,000-kw gas turbine unit commissioned by the Nova Scotia Power Commission at Tusket, near Yarmouth. Installed primarily to handle peak loads, this unit will also provide additional security to the power system in the western end of the province. A 3,000-kw steam plant at Sydney Steel Corporation Ltd. was removed from service in 1971.

The Nova Scotia transmission network was extended by about 100 circuit miles during 1971. Construction is under way on a second major line, due for completion by 1973, linking the Canso Strait area to Sydney.

New Brunswick. The New Brunswick Electric Power Commission was incorporated under the Electric Power Act of 1920. It has maintained a steady growth pattern since 1969. Power generation has risen from 4,196,000,000 kwh in 1970 to 4,748,000,000 kwh in 1971 and 5,894,000,000 kwh in 1972 for a corresponding capital investment of \$389.5, \$405.1 and \$452.4 million.

Generating stations owned by the Commission at December 31, 1972 were: Grand Falls (hydro) 63,000 kw; Tobique (hydro) 20,000 kw; Beechwood (hydro) 115,000 kw; Milltown (hydro) 3,900 kw; Sisson (hydro) 10,000 kw; Courtenay Bay (steam) 263,365 kw; Grand Lake (steam) 98,750 kw; Saint John (steam) 16,000 kw; Chatham (steam) 32,500 kw; Grand Manan (diesel) 2,811 kw; Mactaquac (hydro) 400,000 kw; and Dalhousie (steam) 100,000 kw. The total installed capacity was 1,150,326 kw.

With the exception of Grand Manan, these generating units are interconnected in a province-wide grid system. High-capacity interconnections with neighbouring utility systems in Quebec, Nova Scotia and New England are also available. System load increases during the early part of this decade are being met with base-load power purchased from Hydro-Quebec and with peaking power from hydraulic stations on the Saint John River system in addition to existing thermal stations.

New Brunswick's installed generating capacity was increased by 25,000 kw during 1971 when a new gas turbine peaking unit at Moncton was commissioned. The province's system was further expanded in April 1972 when the fourth 100,000-kw unit at the Mactaquac hydro-electric station was brought on line. Two additional 100,000-kw units to be added later at Mactaquac will bring the plant's over-all capacity to 600,000 kw. Studies are under way to determine the optimum timing for these remaining two units.

A new oil-fired thermal generating station is being constructed at Coleson Cove near Lorneville in the Greater Saint John area. Although the station will consist initially of two 300,000-kw steam units, a third unit of similar size may be added later. The first two units are expected to be brought on line in 1975 and 1976 when the present agreement to purchase power from Hydro-Quebec terminates. A new source of power will be urgently required at that time.

A unit participation agreement to provide for the export of 400,000 kw of Coleson Cove's 600,000 kw to the United States has been submitted to the National Energy Board for approval.

The possibility of developing additional storages on the Saint John River and of increasing the installed capacity at Grand Falls is being reviewed. Nuclear generation in New Brunswick within the next decade is also a definite possibility.

Quebec. The richest of all provinces in water power resources, Quebec possesses about 40% of the total for Canada; and leads in developed water power with installations of 13,766,000 kw in 1971, representing about 45% of the national total. Power production in the province is facilitated by the regulation of stream flow through storage dams owned and operated by the Department of Natural Resources. Some responsibility for regulation rests with the Quebec Hydro-Electric Commission.

The Quebec Streams Commission created in 1910 was authorized to ascertain the water resources of the province, to make recommendations regarding their control and to construct and operate certain storage dams to regulate the flow of streams. In 1955, the Commission was abolished and its functions transferred to the Hydraulic Resources Department, now the Department of Natural Resources. The rivers controlled by the Commission either by means