

Thermal capacity in Newfoundland had, until recently, consisted of small internal combustion stations serving more isolated communities, together with a few medium-sized gas turbine and steam turbine units in larger centres. The province's first major thermal station, the 300,000-kw oil-fired steam generating plant at Holyrood, was completed during 1971 with installation of the second 150,000-kw unit. Located a few miles outside St. John's, Holyrood now provides almost 70% of the province's total thermal generating capability and, in fact, is second only in rated capacity to the Bay d'Espoir hydro-electric station on the Salmon River. With more than 450,000 kw of new capacity installed on the island in the 1970-71 period, neither of the province's major utilities, the Newfoundland and Labrador Power Commission and the Newfoundland Light and Power Company, anticipates any additions for at least the next two to three years.

A major problem facing the Newfoundland and Labrador Power Commission has been the distance separating the rapidly expanding industrial load on the west coast and the major source of power generation at Bay d'Espoir. However, work is expected to begin soon on a second 230-kv line to connect Bay d'Espoir with the Bottom Brook substation near Stephenville. Completion of various sections of this line are set for 1973, 1976 and 1978. The only additions to the island's transmission network during 1971 were made to the 66-kv and 230-kv systems and were very minor in nature.

**Prince Edward Island.** The absence of any large streams in the province has led to an almost total dependence on thermal-power generation except for a few plants used to operate small mills. The Maritime Electric Company, Limited provides direct service to customers in Charlottetown and in the towns, villages and rural areas of the province with the exception of Summerside, where a municipal electric department serves customers with power purchased from the Company while the town's 6,900-kw diesel plant is on stand-by.

Addition of a new 14,000-kw gas turbine unit at Borden during 1971 increased the province's total generating capacity by 18%. About 14 miles of 138-kv transmission line were erected to connect the Borden plant with the existing 69-kv transmission system at Summerside.

Sharp increases in electric power rates were experienced in PEI during the year as a result of an 80% increase in the price of bunker "C" fuel used in the 70,500-kw Charlottetown steam plant which provides more than three quarters of the province's generating capacity. Renewed consideration is now being given by Maritime Electric to the economic and operational advantages of a cable interconnection to the mainland which was studied several years ago by the Atlantic Development Board but not implemented when construction of a planned causeway to the mainland was rejected. The company supplied 274,909,536 kwh to all customers in 1972 for an increase of 12% over 1971 and had an installed capacity of 84,500 kw.

**Nova Scotia.** The self-supporting Nova Scotia Power Commission, with total assets of \$395 million, is one of the province's largest industries. It was created by Act of the provincial legislature in 1919 to develop the limited but useful hydro potential of the province, and to control exploitation of its rivers. Its first objective was to develop remote hydro sites to supply low-cost energy to new industries, particularly pulp and paper, and to a few centres of population. In 1937 this emphasis was changed when the Rural Electrification Act made it possible, through equalization grants, to bring power to low-density farm and rural village areas.

Throughout the 1960s, the Commission acquired a number of small electric utilities, and in 1972 it purchased the Nova Scotia Light and Power Company Limited. The Commission and its subsidiaries employ about 2,200 full-time personnel to serve some 250,000 customers. As at December 31, 1972, the Commission had a total installed capacity of 958,000 kw in 32 hydro and seven thermal stations. About 75% of this capacity is, however, in the thermal stations, with hydro furnishing the balance. Most of the province's economic hydro potential has been exploited. Vast energy potential exists at several sites on the Bay of Fundy and studies are now under way to determine the economic feasibility of using this tidal power. Except for such developments, future expansion in Nova Scotia will be concentrated on expanded thermal generating facilities. Firm commitments include a 100,000-kw addition to the Tuft's Cove plant scheduled to go into service in 1972 and a 150,000-kw unit addition to the Point Tupper station which should be on line by the end of 1973. Although definite plans have not yet been completed, most new capacity to be added beyond 1973 will probably be centred