To complement the research facilities at Chalk River, Ont., AECL is building a nuclear research establishment at Whiteshell, about 65 miles northeast of Winnipeg, Man. The first major experimental facility will be an organic cooled, heavy-water-moderated reactor with an initial design power output of 40,000 kw.

Section 2.—Progress in Construction of Generating Facilities, 1964

In 1964, a net total of 754,000 kw. of electric power generating capacity was installed in Canada to help meet the nation's constantly growing requirements for electric power; the total included 481,000 kw. of thermal capacity and 273,000 kw. of hydro. This new capacity put into service boosted the nation's total installed hydro generating capacity to 20,300,000 kw. and total installed thermal capacity to 6,800,000 kw. On the basis of current forecasts, a total of 2,300,000 kw. of additional capacity should come into operation in 1965. Hydro will account for 1,400,000 kw. and thermal for the remaining 900,000 kw. Looking farther ahead, new capacity currently under construction or scheduled for service within the next few years should yield an additional 15,100,000 kw., of which 9,200,000 kw. will be hydro and the remainder thermal. These estimates do not include any of the vast potential that will eventually be developed on the Churchill (Labrador), Columbia and Nelson Rivers and on a number of other major river systems in Canada.

Atlantic Provinces.—In Newfoundland, the Newfoundland and Labrador Power Commission has been given responsibility for developing the Bay d'Espoir site on the Salmon River, generating capacity at which will total 459,000 kw. in six units; three units will be in service by the end of 1967. Development of the huge hydro potential of Churchill Falls on the Churchill River in Labrador (formerly Grand Falls on the Hamilton River) awaits an agreement concerning transmission routes to potential markets. For full development of the 1,040-foot fall, Hamilton Falls Power Corporation Limited proposes an installation of ten units, each rated at 391,400 kw. Early in 1964, United Towns Electric Company Limited completed construction at Salt Pond near Burin on Burin Peninsula of a thermal plant housing three diesel units, each rated at 500 kw. Elsewhere in the province, new thermal capacity totalling 5,110 kw. was placed in service during the year.

In Nova Scotia, the Nova Scotia Light and Power Company Limited plans to put a 100,000-kw. unit into service at the Tufts Cove thermal station near Dartmouth. This is the first of a multi-unit development that may eventually exceed 500,000 kw. in capacity. Two hydro developments at Lequille on the Allain River and at Alpena on the Nictaux River, with an estimated total capacity of 16,200 kw., are being considered by the Company. Under construction for the Nova Scotia Power Commission are two developments at Riverdale on the Sissiboo River and at Wreck Cove on Wreck Cove Brook, which would have a total generating capacity of 73,500 kw. Seaboard Power Corporation Limited is expanding its 72,000-kw. steam plant at Glace Bay by the addition of a 36,000-kw. unit scheduled for early 1966. The unit will be owned by the Nova Scotia Power Commission and will supply power to the heavy-water plant under construction in the area. Imperial Oil Company's 3,750-kw. thermal plant at Dartmouth is expected to be in service in mid-1965.

In New Brunswick, work on the New Brunswick Electric Power Commission hydro plant at Sisson on the Tobique River continued in 1964; the plant will house a single 10,000-kw. unit and be in operation in September 1965. The first two units at the Comnission's hydro station at Mactaquac on the St. John River are expected to go into service early in 1968; the plant, designed for six 100,000-kw. units, will be completed by 1976. The capacity of the Courtenay Bay steam plant at East Saint John is being extended to 160,840 kw. by the addition of a 13,340-kw. unit in early 1965 and a 100,000-kw. unit in