

It is estimated that 330,500 kw. of new thermal capacity will be installed in 1967 and another 780,000 kw. is scheduled for subsequent years.

A 161,500-kw. hydro-electric unit, at present the largest in Canada, went into service in 1966 at the Big Bend development of Calgary Power Ltd., raising the capacity of the plant to 305,500 kw. At the pumping station associated with the Big Bend plant, a pumping-generating unit with a generator rating of 11,250 kw. was installed in 1966, increasing the total generating capacity to 20,970 kw. in two units. The Company's Wabamun thermal plant is being extended to house a new 300,000-kw. coal-burning unit which, in 1967, will boost the plant capacity to 582,000 kw. A similar unit is under consideration for commissioning in 1970. Canadian Utilities Limited installed a 20,000-kw. gas-turbine unit at Simonette in 1966, and is installing a 150,000-kw. coal-fired unit for service in 1969 at the Battle River thermal plant near Forestburg. The City of Edmonton commissioned a 75,000-kw. gas-fired steam turbo-generator at its Edmonton thermal plant in 1966 and plans to build a new plant consisting of two 165,000-kw. gas-fired units for service in the early 1970s.

British Columbia.—British Columbia's electric generating capacity increased by 114,520 kw. in 1966, and a further 304,100 kw. is scheduled for service in 1967. New installations scheduled for operation after 1967 will yield almost 2,500,000 kw.

In 1966, Cominco Ltd. completed the installation of the fourth and final unit at Waneta hydro-electric station on the Pend d'Oreille River; the new unit, rated at 76,000 kw., increases the station capacity to 292,000 kw. A 34,560-kw. turbo-generator was installed by Columbia Cellulose Company Limited to produce electric power from process steam for the bleached-craft mill at Watson Island near Prince Rupert. Installation of the fourth 162,000-kw. unit at the British Columbia Hydro and Power Authority's Burrard thermal station will be completed in 1967, raising the total generating capacity of the station to 648,000 kw. During 1967, MacMillan, Bloedel and Powell River Limited will install a 40,000-kw. steam turbo-generator at the 14,925-kw. Powell River plant, and the capacity of Alcan's Kemano hydro-electric station will be boosted to 812,800 kw. with the addition of an eighth unit rated at 105,600 kw.

Substantial progress in construction on the British Columbia Hydro and Power Authority's Portage Mountain development on the Peace River was reported in 1966. The development is planned for ten units with a total capacity of 2,270,000 kw., three of which are scheduled for service by the autumn of 1968. Work progressed on the three storage dams being built by the Power Authority under the terms of the Columbia River Treaty which entitles Canada to one half of the power benefits accruing in the United States from the regulation of 15,500,000 acre-feet of water to be stored in Canada behind the Duncan, Arrow and Mica Dams and one half of the value of the estimated flood damage prevented in the United States through the operation of the dams for flood control. The three storage dams are required by the Treaty to be in operation in 1973.

Yukon and Northwest Territories.—In 1966, a net total of 1,340 kw. of new thermal capacity was added at various locations in the Yukon Territory and 750 kw. in the Northwest Territories. Some 7,100 kw. of new thermal capacity will begin operation in 1967 and at least 8,000 kw. (possibly as much as 16,000 kw.) of hydro capacity is proposed for installation during 1968-70.

Section 3.—Power Generating Capability and Load Requirements

Power generating *capability*, as covered in this Section, is the measurement of the available generating resources of all hydro and thermal facilities at the time of the one-hour firm peak load for each reporting company, and is not equal to the *capacity* of such generating facilities. For example, a hydro plant may have a capacity of 100,000 kw. but if, at the time of peak load, the water available for generation is only 80 p.c. of the plant capacity requirements, then its capability is 80,000 kw.