Total generating capability has grown at a rapid rate since 1956. The annual rate of increase was 6.8 p.c. in the ten-year period 1956-66 and 4.9 p.c. in the four-year period 1962-66. In comparison, the forecast rate of growth for the years 1967-71 is 8.6 p.c.; thermal generating capability is expected to grow at an average rate of 15.2 p.c. a year in the forecast period compared with 13.3 p.c. in the period 1956-66, and hydro-electric capability is expected to increase at 5.9 p.c. a year compared with 5.3 p.c. in the 1956-66 period. This rate of growth in hydro generating capability in the forecast period is attributable to the large power projects under construction in relatively remote areas which will be completed within the next few years (see pp. 670-673).

Among the provinces, Quebec has the largest generating capability, followed by Ontario, British Columbia and Alberta. Quebec also has the largest hydro-electric generating capability, followed by Ontario and British Columbia, but Ontario has the largest thermal capability, followed by Alberta and British Columbia. The first nuclear power station went into commercial operation in Ontario in late 1966.

The largest absolute growth in generating capability for the forecast years is indicated for Ontario at 5,322,000 kw., followed by Quebec at 3,668,000 kw., British Columbia at 2,073,000 kw. and Alberta at 1,121,000 kw. Ontario will meet most of its increased generating capability by adding 4,814,000 kw. in thermal capability and 508,000 kw. in hydro capability, the former including 1,200,000 kw. nuclear. Quebec will add 3,327,000 kw. hydro and 341,000 thermal and British Columbia 1,706,000 kw. hydro and 367,000 kw. thermal.

Firm power peak load is the measure of the maximum average net kilowatt demand of one-hour duration from all loads, including commercial, residential, farm and industrial consumers as well as the line losses. Such load demand increased at the rate of 6.6 p.c. a year from 1956 to 1966 and 8.2 p.c. a year from 1962 to 1966; peak load demand is forecast to increase at the average rate of 7.1 p.c. a year in the period 1967-71. As a result of the rapid increase in generating capability and the somewhat slower but steady increase in the peak loads, together with the slight reduction in deliveries of firm power to the United States, the indicated reserve on net generating capability in the 1956-66 period increased each year from 1956 to 1960 and in 1962 and 1965. The forecast is for increases from 1967 to 1971 with the exception of 1968. The reserve ratio as a percentage of firm power peak load reached a high of 28.2 p.c. in 1960 and fell to 11.4 p.c. in 1966 but is expected to increase to 19.1 p.c. in 1971.

3.—Net Generating Capability, by Province, 1966

(Thousand kilowatts)

Province or Territory	Type of Generating Facility				Total
	Hydro-Electric	Thermal-Electric			
		Steam	Internal Combustion	Gas Turbine	
Newfoundland	454	52	13	25	544
Prince Edward Island	—	51	7	—	58
Nova Scotia	141	482	3	—	626
New Brunswick	251	421	7	—	679
Quebec	10,141	374	15	36	10,566
Ontario	5,687	2,947	7	149	8,790
Manitoba	1,061	291	11	—	1,363
Saskatchewan	392	531	33	40	996
Alberta	490	820	26	155	1,491
British Columbia	2,779	664	121	177	3,741
Yukon and Northwest Territories	63	1	14	1	79
Canada	**21,459**	**6,634**	**257**	**583**	**28,933**