

The Queenston-Chippawa development was begun in 1917 as a war measure, when the consumption of power in munition factories was greatest, at a time when the duration of the war could not be foreseen. High wage costs and high prices of material raised construction costs far above the original estimate of \$10,500,000, besides which the ultimate capacity of the plant was enlarged. The cost of completing the nine units, totalling 522,790 h.p., is now estimated at approximately \$76,302,482.

The first of these units began operation on Dec. 28, 1921; three others commenced operations in 1922 and the fifth in 1923. The sixth and seventh units were put into operation in 1924 and the eighth and ninth in 1925. The present normal operating capacity of this plant is 370,000 kilowatts or 522,790 h.p. It is operated independently but is connected with the other two power plants of the Commission at Niagara Falls, (the Niagara Ontario Power plant and the Niagara Toronto Power plant), the combined operating capacity of the three plants being 637,000 kilowatts or 853,890 h.p. In addition the Commission receives the output of two units of the Canadian Niagara Power Co., totalling 20,000 h.p. The total system power factor at the time of the peak load approximates 85 p.c. In 1926 a contract was completed for the purchase of 260,000 horse power from the Gattineau Power Company.

Hydro-Electric Power Statistics.—The Canada Year Book of 1910 (p. xliii) described the turning on, on October 11, 1910, at Berlin (now Kitchener), Ontario, of electrical energy generated by Niagara falls, and the initial work carried out by the Ontario Hydro-Electric Power Commission for the supply of electrically generated power to 15 municipalities. The growth of the Hydro system in Ontario is shown in the amount of power used by its consumers. In 1910, the Commission supplied 750 h.p. to 10 municipalities; in 1915, 100,242 h.p. to 99 municipalities; in Dec. 1926 the amount of power taken was 536,119 h.p. "The government electric utilities in Ontario have grown from a league of seven municipalities formed in 1903 until now the vested interests of the people in this class of property are represented by investments totalling over \$275,000,000, the bonded indebtedness of which is guaranteed by the Province of Ontario."

In Table 9 will be found a consolidated operating report of the Hydro-Electric Power Commission for the years 1912 (the earliest year for which the statistics are available) to 1926. The table shows that during the 15-year period covered, the number of municipalities securing electricity from the Commission has increased from 28 to 249, the number of consumers from 34,967 to 420,590, the earnings from \$1,617,674 to \$22,677,999, and the operating expenses from \$1,377,168 to \$20,343,232.

9.—Consolidated Operating Report of Electric Departments of Hydro Municipalities in Ontario, 1912-1926.

Years.	Number of municipalities.	Number of consumers.	Horse-power used.	Earnings.	Expenses.
			h.p.	\$	\$
1912.....	28	34,967	-	1,617,674	1,377,168
1913.....	45	65,697	-	2,617,440	2,041,133
1914.....	69	96,744	70,698	3,433,656	2,678,328
1915.....	99	120,028	100,242	4,070,295	3,371,414
1916.....	128	148,732	120,768	4,883,601	4,140,066
1917.....	143	170,916	157,048	6,070,065	5,077,491
1918.....	166	183,987	169,990	7,082,039	5,736,335
1919.....	181	216,086	185,355	7,327,055	6,531,493
1920.....	184	245,666	208,232	9,707,901	8,094,056
1921.....	205	268,743	242,349	10,981,942	9,317,781
1922.....	214	303,090	294,061	12,756,104	11,343,765
1923.....	223	348,028	350,486	17,219,044	15,208,508
1924.....	241	374,406	402,282	18,798,723	16,661,164
1925.....	244	402,056	481,844	20,974,611	18,887,750
1926.....	249	420,590	536,119	22,677,999	20,343,232