Transmission Company. This company draws water from the summit level of the canal and carries it over the Niagara escarpment at Decew Falls, where power is developed under a net head of about 265 ft., 57,000 h.p. of capacity being now in active use. Through the medium of 213 miles of 10,000 to 40,000-volt transmission line power is supplied for the operation of an extensive system of radial and street railways, and for the lighting and industrial requirements of a number of municipalities in the Niagara Peninsula, as well as to Brantford, Burlington and Oakville. The present commercial prominence of the city of Hamilton is due in a large measure to the fact that power developed by the Dominion Power and Transmission Company was made available at rates sufficiently attractive to encourage the establishment of industries.

The normal difference in level between Lake Superior and Lake Huron is about 20 ft., of which about 18 ft. is concentrated at the St. Mary's Rapids. The minimum flow at this point will produce 90,000 h.p. under an 18-ft. head, half of which capacity belongs to Ontario. For some years past this power has been partially utilized both in Canada and the United States, about 17,000 h.p. being now developed on the Canadian side by the Algoma Steel Corporation and its allied industries. This company has under consideration the remodelling of its hydraulic plant and an increase in capacity to 30,000 h.p.

So far as the province of Ontario is concerned, the power possibilities of the St. Lawrence River are limited to that portion lying between Lake Ontario and Lake St. Francis. The normal fall in this portion of the river is about 88 ft., and possibly 70 ft. of this could be effectively utilized for power development. On this basis the aggregate effective capacity, under normal low-water conditions, would be about 1,000,000 h.p., of which 500,000 h.p. would be available for use in Ontario.

At the present time there is no development in this reach of the main river, present development being confined to various small water powers created along the shores by the St. Lawrence canal system. Hydraulic plants connected with the canals are operating at Cardinal, Iroquois, Morrisburg, Milles Roches and Cornwall, their aggregate capacity being about 5,800 h.p. The bulk of this power is used locally, the two largest plants supplying the town of Cornwall.

As regards the feasibility of developing the international water powers of the St. Lawrence on a large scale, it is to be understood that such development would require the consent or co-operation of the United States. Furthermore, the construction cost of permanent works for the proper development of these powers will be abnormally high, and a market demand very largely in excess of that now existing will be necessary to place any such development scheme upon a feasible commercial basis.

Summary of Undeveloped and Developed Water Powers.—Taking the various figures for power capacity mentioned above and adding thereto the estimated capacity of a number of smaller rivers not specifically mentioned, the following approximate summation is derived for the total amount of power capable of development in the province of Ontario:

Ottawa River and tributaries	688,000 h.p.
Great Lakes tributaries	446,000 h.p.
Hudson Bay slope	250,000 h.p.
James Bay slope	1,500,000 h.p.
International boundary rivers	2,045,000 h.p.
Total potentiality	4,929,000 h.p.

Similarly the totals, for the developed power, may be summarized as follows:

Ottawa River and tributaries	71,000 h.p.
Great Lakes tributaries	137,000 h.p.
Hudson Bay slope	22,000 h.p.
James Bay slope	70,000 h.p.
International boundary rivers	462,000 h.p.
Total developed power	702,000 h.p.

Of this latter total, about 574,000 h.p. is electric energy sold for light and power, about 69,000 h.p. is used for pulp and paper manufacture, and about 59,000 h.p. is used for the most part in the form of hydraulic power directly applied. According to the above figures, the developed capacity of the Ontario water powers is about one-third greater than the capacity developed in Quebec. Ontario's advantage is mainly derived from the capacity developed for purposes of transmission, as is indicated by the fact that in Ontario 2,200 miles of 10,000 to 110,000-volt transmission line is in operation at the present time. The result of this widespread transmission system, and extensions to the same now under construction, is to make hydro-electric power available to all the cities and large towns in Ontario, and to a rapidly increasing number of smaller towns, at prices ranging from $15 to $40 per horse-power per annum.

RAILROAD EARNINGS.

The weekly railroad earnings for August are as follows:—

Canadian Pacific Railway.

	1914.	1915.	Decrease.
August 7	$2,236,000	$1,787,000	— $449,000
August 14	2,162,000	1,815,000	— 347,000
August 21	2,154,000	1,456,000	— 198,000
August 31	2,980,000	2,856,000	— 124,000

Grand Trunk Railway.

August 7	$1,106,823	$ 993,773	— $113,050
August 14	1,068,710	1,004,412	— 64,298
August 21	1,096,476	1,052,483	— 43,993
August 31	1,581,830	1,535,312	— 46,518

Canadian Northern Railway.

August 7	$ 354,400	$ 259,500	— 8 94,500
August 14	319,500	249,000	— 70,500
August 21	307,600	286,500	— 21,100
August 31	386,200	397,500	+ 11,300

The Grand Trunk Railway Company's return of net earnings for July makes a favorable showing with a gain of $250,047. Total net earnings for the month were $1,274,764, compared with $1,024,717 in the same month a year ago.

The Canadian Pacific Railway's gross earnings for July, 1915, the first month of the company's fiscal year, were $7,895,375. As working expenses for the month were $5,094,972, net profits amounted to $2,800,403. Net profits in July, 1914. were $3,778,446, or $978,043 in excess of the same month this year.

Gross and net earnings of the road for July this year compare with the previous month as follows:—

June.	1915.	Decrease.
Gross	$7,512,034	$2,542,387
Net	2,678,031	657,594
July.		
Gross	7,895,375	2,681,569
Net	2,800,403	978,043

In connection with the City of Toronto water supply system, work is now well under way on Toronto Island in the construction of a steel conduit to connect the new 84-in. pipe and the old 72-in. pipe with the new filtration plant, which is also under construction.