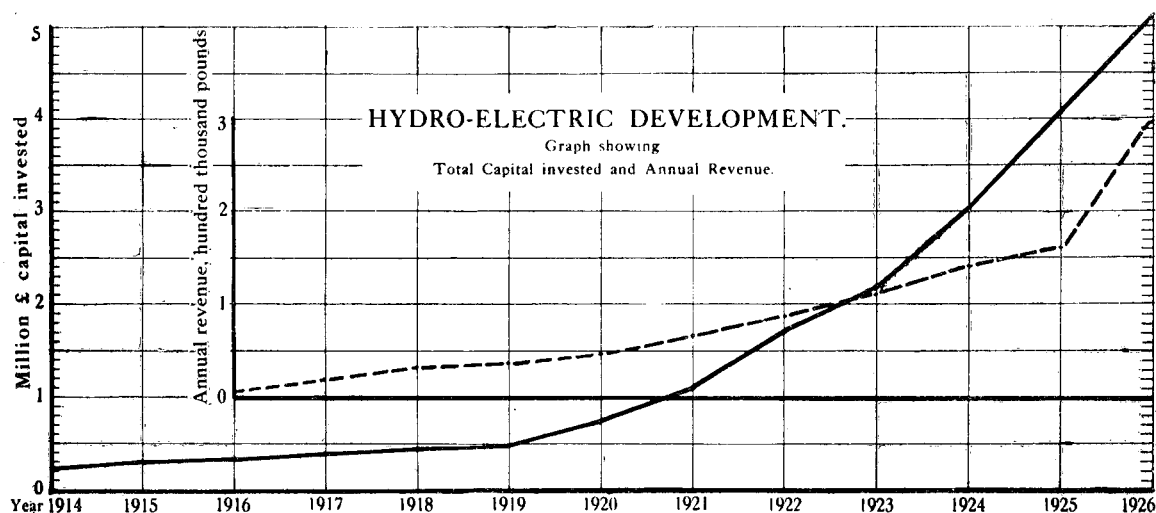


The expenditure on works is shown on the attached graph :—



From this it will be seen that the capital expenditure at the 31st March, 1916, the first complete year of supply, was £362,000 ; at March, 1921, it had grown to £1,072,000 ; and by March, 1926, to £5,134,000. The growth in annual revenue is also shown on the same graph, indicating in 1916 a total annual revenue of £8,518, in 1921 of £66,178, and in 1926 of £287,942 per annum.

FUTURE DEVELOPMENTS.

The completion of the large works at Arapuni and Waikaremoana, with consequent extensions to transmission-lines and substations, and provision of extra plant at Arapuni, will require very heavy expenditure for the next three years. In addition to this the growth of load on the Lake Coleridge system is such that it will apparently be necessary to make a start with the construction of an additional source of power in the South, probably within about a year's time. These developments will call for an expenditure of at least £1,000,000 per year for the next four years ; and although there is little doubt but that the hydro-electric development carried out to date has been an unqualified success, it is doubtful if the country would be justified in continuing expenditure for a much longer period at this high rate. This is all the more evident when we remember that for every pound expended by the Government on generating-works, an equal or greater sum has to be expended both by the distributing supply authority and by the actual consumer before the power can be fully utilized.

It is true that in the North Island in particular the Government rate of expenditure can be very considerably reduced after the three main key stations are in operation—there will be extensions to be made from time to time ; whilst in the South Island there will still remain further sources to be developed before we can attain to the ideal of making power available to every one within the Dominion who can be put within reasonably economic distance of the transmission system. We may permit the annual expenditure to be reduced after about four years' time, but as far as can be seen at present it cannot be allowed to stop, and must continue at somewhat reduced rate for many years to come.

The construction of power-supply system on modern lines involves very heavy initial expenditure on headworks and transmission system designed to meet considerable future increases in load. It is only to be expected in such cases that there will be difficulty in earning a high percentage return on the capital invested in the earliest years of operation. The schemes already in operation have indicated this very clearly, and the two older schemes have now reached a stage where there are sufficiently high percentages to be able to offset the initial losses. The percentage earned on operating capital, after deducting full operating-expenses, is shown on the attached graph for the hydro-electric development to date.

As the Government scheme of supply provides generally for bulk supply to local authorities and leaves the actual distribution and sale of power to those