

Horahora.—Completion of new weir at intake; erection of transmission-lines to Rotorua, to Hangatiki, and from Waikino to Katikati.

Mangahao.—Erection of second dam on Mangahao to give storage necessary to run station to full capacity. Extension of main transmission-lines to Napier and to Wanganui. Erection of substations at these points, and completion of substation at Ongaonga.

Arapuni.—Continuation of the contract work by Sir W. G. Armstrong, Whitworth, and Co. (Limited). It is anticipated that the river will be deviated from the base of the dam through the diversion tunnel towards the end of the year, and the placing of the bulk concrete commenced. A start will be made with the erection of main transmission-line to Auckland, and with extension to give supply to the Waitemata Power Board, and with substations to supply that Power Board and the Franklin Power Board.

Waikaremoana.—Plans and specifications for the first stage, 20,000 kilowatts, of the main development will be completed, and if satisfactory contracts for the sale of power are entered into a commencement will be made with the construction.

Other Schemes.—Survey and investigation work will be continued on other schemes, so that definite plans can be made available for further developments to fit into the general scheme whenever load requirements become such as to warrant additional stations being built.

The works now under construction and about to be started at an early date will require a capital expenditure of about £1,000,000 per annum for the next few years, but are such that we may reasonably expect to pay interest and operating-costs within a short period after completion. Meanwhile the investigation of additional sources of power, particularly in the South Island, will be continued, so that as soon as there is any indication that the present stations are likely to become fully loaded, or that any considerable power load is likely to develop in new districts, a scheme of development will be ready for construction.

In addition to carrying on investigation work on power schemes to meet the ordinary industrial and domestic development, it is proposed to put in hand more detailed surveys of some of the large power sources that exist on the western sounds of Otago and Southland. It is thought that if the potential value of these sources of power is made known in concise and accurate form, it may be the means of attracting special industries to the locality to take advantage of the very cheap power that can undoubtedly be developed in these localities.

POWER BOARDS, ETC.

Apart from the work done directly by the Department, the Power Boards throughout the country have carried out a considerable amount of work in distributing the power purchased in bulk from the Department. At the end of the financial year 39 Boards had been formed, covering an area of 62,520 square miles, or 61 per cent. of the total area of the Dominion. The total population in the area controlled by these Boards is 776,510, or 59 per cent. of the population of the Dominion; the unimproved capital land value of the Power Board areas amounts to £231,485,074, or 70·3 per cent. of the total unimproved capital value of the Dominion.

GENERAL.

Apart from the business of generating and supplying power in bulk, the Department has a most important function in controlling and regulating the various electrical works carried out by Power Boards and other local authorities throughout New Zealand. As an indication of the growth of this side of the electrical development it may be mentioned that since 1921 the number of miles of electric lines has increased from 1,909 to 6,011, or an increase of 215 per cent. in four years. With such rapid growth we must be very careful to see that the construction and operation is uniformly safe and economical, and that the general consumer, in most cases unskilled in the intricate technical details of electrical supply, is protected in all ways. This section of the work is fast outgrowing the capacity of the present organization in the Department, and it is hoped during the year to reorganize it so as to enable this work to be carried out in a more comprehensive way.