

In the meanwhile the necessary extension of the main road (four miles) to give access to the power-house and the necessary service roads (four miles and a half) for the tunnel have been completed, and the tunnel inlet and outlet works are in hand, and will be completed in ample time. The site for the permanent staff village has been fenced and roaded, and the contract for the staff cottages is practically completed.

The determining feature in the completion of the installation and the commencement of supply is the tunnel contract. This was let on the 16th February, 1912, and the contract date for completion is the 16th August, 1913. The country being encountered is very easy and rapid progress should be made, but on the 20th September only 18½ out of 107 chains had been driven, and the lining had not been commenced. Steps are being taken to ensure more rapid progress, and it is anticipated that the tunnel will be completed by the end of next year. Under these circumstances arrangements have been made with the Christchurch City Council and a provisional contract entered into to commence supply as from the 1st May, 1914. The annual charge agreed upon, which will form the basis of other similar agreements, is at the rate of £8 13s. 4d. per kilowatt (£6 10s. per horse-power) of maximum load up to 300 kilowatts (400 horse-power), and £5 per kilowatt (£3 15s. per horse-power) of maximum load for all over 300 kilowatts. This will enable the city authorities to convert, distribute, and retail the energy at about one-half their present charges.

Investigations with regard to the most suitable sources of supply in the North Island have been and are still being made. The question is being dealt with in a comprehensive manner with a view to making electric power generally available throughout the Island, not only in the cities but also in country districts, and for the operation of light railways and ultimately main-line railways. The sources of power investigated so far are Lake Waikaremoana, and the Hutt, Makuri, Waiohine and Tauherenikau Rivers, but as several additional sources still have to be examined in detail no definite and final proposals can yet be drawn up.

Last year's vote for development of water-power was £50,000, but only £9,082 was expended. For the current year an appropriation of £85,000 is proposed.

#### RAILWAY ELECTRIFICATION.

Complete investigations have been made and specifications drawn up for the electrification of the Christchurch-Lyttelton line so that tenders can be invited for this work without delay as soon as the power from Lake Coleridge is available. Similar investigations are in hand in connection with the Wellington - Upper Hutt Railway in conjunction with the electric-power proposals for the North Island.

#### IRRIGATION.

The details of the Ida Valley scheme were pretty fully described in last year's Statement.

The law requires that every proposed scheme shall be authorized by an Order in Council, and that before such Order is issued the owners and occupiers of the lands to be benefited thereby shall be given an opportunity of entering into contracts with the Crown to take water from the works when completed at such price as the Governor may approve, and that unless at least half the holders enter into such contracts the scheme cannot be gone on with. The price fixed for the water in this instance was at the rate of 10s. per acre per annum for the area proposed to be or capable of being irrigated. The landholders were duly interviewed, and a majority of them signed the necessary agreements, and the Order in Council authorizing the scheme was then issued, and a commencement has recently been made with the work. Some of the settlers have since petitioned Parliament, saying that they cannot pay so high a rate as 10s. per acre, and suggesting an alteration to 4s. Some modification of the scheme may therefore have to be made, and with this object in view I propose to visit the district during the recess and go into the details with the settlers affected.

Other very necessary schemes are under consideration: notably one, to bring water from the Manuherikia River towards the Dunstan Flat, *via* Springvale; and