

Negotiations for the sale of power to the city are proceeding, and it is anticipated they will reach finality shortly.

ARAPUNI ELECTRIC-POWER SCHEME.

In accordance with the contract entered into with the Auckland Electric-power Board, specifications have been drawn up and issued for the construction of the dam and headworks at the Arapuni Rapids, Waikato River, and tenders close early next year. Several inquiries have been received from large construction firms in Great Britain and America. Meanwhile tenders for the power-house building and plant will be advertised shortly.

The Department has already let contracts for the construction of the access road between the railway and the dam-site, and has organized a haulage plant for metalling operations. The object of this is to avoid delay in opening up the work when the dam-construction is undertaken.

In order that Arapuni shall be remunerative from the start it is necessary to ensure a combined load of at least 30,000 kw. on this station and Horahora. Towards this the Auckland Power Board will have an installed capacity at the end of this year of 30,000 kw., and has recently decided to install a further 5,000 kw. in order to cope with the demand it anticipates before 1928. A proposal is also in hand for the formation of the Franklin Electric-power Board, which will further increase the demand. This, with the 10,000 kw. of load which it is anticipated Horahora will be carrying in 1928, will give the full amount of business which is required to render the Arapuni scheme remunerative from the start.

HYDRO-ELECTRIC POWER GENERALLY : FUTURE DEVELOPMENT OF HYDRO-ELECTRIC POWER IN DOMINION.

As indicated in the table reproduced herewith, the following works are provided for :—

- (a.) Completion of Mangahao to 20,000 kw. in 1924, with transmission-lines to supply Wellington, Masterton, Dannevirke, and Marton, and with early extensions to Napier and Wanganui.
- (b.) Construction of Arapuni headworks, together with first three generating units, amounting to 45,000 kw., in 1928, with additional units of 15,000 kw. each as required; also duplicate transmission-lines to Auckland.
- (c.) The extension of the existing power-house at Horahora, which is now in hand, and will be completed early in 1924, bringing up its capacity from 6,300 kw. to 10,300 kw., with transmission-lines to Auckland, Te Kuiti, and Rotorua, in addition to the existing lines to Waihi, Hamilton, and Te Awamutu.
- (d.) The extension of Lake Coleridge by addition of two units, each of 7,500 kw. capacity, in 1926. Plans and specifications for the work are ready, and the work will be proceeded with as soon as a definite contract can be entered into with the Christchurch City Council to take the power. The programme for development of Lake Coleridge includes extensions of transmission-line to Waimate, Oamaru, and North Canterbury, in addition to the lines to Ashburton and Timaru, which are practically complete.
- (e.) In addition to the above, preparations are being made for the installation of a major scheme at Waikaremoana. This will probably take the form of two units of 10,000 kw. each. In the attached programme this is scheduled for completion in 1928, but will not be undertaken until the power demand in sight assumes proportions in keeping with a station of this size.

Preliminary investigations have been made of suitable sources for power for Otago, Marlborough, Nelson, and Westland.

In addition to the Government developments, the Dunedin City are extending their Waipori Falls station, now of 6,000 kw. capacity, by the addition of a 3,000 kw. generator, with provision ultimately for three more such units, and arrangements have been made whereby they will give supply over the Government transmission-lines.