

Feeder-lines have been extended to Lyttelton, Sunnyside, and Tai Tapu districts, and further extensions are under consideration. Negotiations are proceeding with different borough authorities in South Canterbury as far as Timaru, and, provided satisfactory arrangements are made, a transmission-line will be erected between the power-house at Lake Coleridge and Timaru, from which the whole of South Canterbury will be supplied.

■ The demand for electrical energy by power-users throughout Canterbury is most encouraging, ranging from the electric tramways, local bodies, and larger industrial concerns to small farmers, who find that by utilizing a local organization such as a dairy-factory company they can with advantage bring the current on to every farm for lighting and machine-driving purposes.

The total expenditure on this scheme from its inception to the 31st March last was £262,034, and the installation of the fourth unit is expected to place the business on a footing where interest on capital, maintenance, depreciation, and working-expenses will all be defrayed out of revenue. Subsequent additions of plant to satisfy a growing demand should increase the margin of profit.

The rapid developments at Lake Coleridge have monopolized the efforts of the Government's Electrical Engineers during the past year; but now that this scheme has reached a practical stage, attention will be directed to investigations to decide the best means of providing an adequate supply of electrical energy to serve the North Island.

Numerous water-power licenses have been granted during the year to local authorities wishing to develop local sources of power.

#### IRRIGATION.

At the Otekaike Settlement the construction of six miles of distributing-race to serve settlers on the eastern side of the stream was completed under contract, and additional races of a total length of two miles and a half were laid out. The settlers will be able to take advantage of the supply during the coming summer.

The development of the important scheme to irrigate the Ida Valley, in Central Otago, was appreciably advanced during the summer months. The large concrete dam at Manorburn was almost finished when work was stopped by heavy frosts in April, and this part of the scheme will be completed during the ensuing spring. The excavation of the main races along either side of the valley proceeded steadily while weather-conditions permitted, and it is hoped that these races will be out of hand before the end of next summer. The construction of the Poolburn dam and some concrete-work at the Moa Creek weir remains to be done, also some widening and lining of the old Bonanza Race, which is to be incorporated in the scheme. Water was supplied to settlers in the valley during a limited period in the middle of last summer, and a temporary supply on the same conditions will be available next summer.

Contracts were prepared for part of the work of bringing in the Manuherikia River water to irrigate the lands lying between Clyde, Alexandra, and Chatto Creek. After some delay, owing to unsatisfactory tenders, two sections were let.

The intake of this race from the Manuherikia River requiring particular attention in construction, it was decided to employ day labour, but it was found to be almost impossible to obtain men suitable for this class of work, and more especially was difficulty found in securing the services of a competent overseer, owing to so many having gone to the war. A gang has, however, now been put on to do the necessary rock-excavation, and as soon as the weather permits the concrete-work will be undertaken.

#### WAIHOU AND OHINEMURI RIVERS IMPROVEMENT.

The recently completed channels in the Waihou River and the stop-banks along the right bank of the Ohinemuri River were tested by a flood following a heavy rainfall in the district in March last, and proved quite effective, no appreciable damage being done, and there being no overflow into the Paeroa Township. Surveys have been continued with the object of constructing further stop-banks along the