

HYDRO-ELECTRIC DEVELOPMENT

Notwithstanding the conditions created by the war, the usual high standard of efficiency in supply and of service was maintained during the year. All generating-stations, however, were taxed to their limits in meeting demands, and had it not been for the first unit at Waikaremoana Lower Development being brought into operation the position would have been very serious. The demand was increased by over 5 per cent. in each Island. To meet this extra load with a minimum of inconvenience to consumers generally, various restrictions were continued.

The second machine at Waikaremoana Lower Development will be installed and in operation in time for the 1944 winter load, and with further reductions in broadcasting-hours serious restrictions should again be avoided, provided hydraulic conditions remain as they are. As previously stated, however, it is necessary to run all plant on overload to meet the demand, and it is therefore incumbent on all consumers and persons who can to see that all extravagant and wasteful uses of electricity are eliminated.

Alternative means for generating power are being investigated, and inquiries are being pursued abroad as to the possibility of obtaining second-hand generating plant to help out meantime. So far, however, no feasible proposition has been received.

In my report last year I mentioned that consideration was being given to plans for post-war development. I am pleased to be able to report this year that Cabinet duly approved a comprehensive scheme of development, and priority has been given to hydro-electric construction works accordingly. An immediate commencement will be made on a further station—Maraetai (80,000 kW.), on the Waikato River—and a definite scheme of expansion at the rate of 40,000 kW. annually will be pursued.

Development in the South Island was also reviewed, and the work at Lake Tekapo will be recommenced just as soon as man-power is available.

Owing to departmental circumstances arising from the war, it has not been found possible to include an audited statement of the Electric Supply Account with this report, but the matter is now in hand, and the statement, duly audited, will be included in paper B.—I [Pt. IV] in terms of section 57 of the Finance Act, 1932.

RAILWAY-CONSTRUCTION

The limitations imposed by the scarcity of man-power and materials, together with the volume of urgent works of higher priority required for defence purposes, have again had the effect of greatly curtailing construction activity on railway works. Nevertheless, some progress has been made.

During the year the Westport—Inangahua line was completed, and was formally handed over to the Railways Department on 5th December, 1943.

Construction activity was accelerated on the South Island Main Trunk so as to reduce the length of essential road transport and thereby save rubber. On 17th May, 1943, the southern railhead was advanced 10 miles from Hundalee to Oaro, and on 11th March, 1944, the northern railhead was moved $22\frac{1}{4}$ miles from Clarence to Kaikoura. I intend to close the remaining gap in the rails with all the speed of the man-power and materials at my command.

It was possible to organize sufficient man-power for the resumption in September, 1943, of the construction of the Turakina—Okioia railway deviation.

Work was commenced on the construction of the Turakina and Wangaehu railway-bridges, and extensive test borings of the tunnel linings were commenced.

As part of a comprehensive plan for housing construction in the Hutt Valley, surveys were undertaken for the extension of the double-track suburban line beyond Waterloo.

ROAD-CONSTRUCTION

As was the case last year, works under this head were confined to the completion of existing works. Opportunity was taken, where staff was available, to carry out surveys and investigations for works which will be undertaken when circumstances permit.

IRRIGATION AND WATER-SUPPLY

Throughout the irrigation districts of Central Otago and Canterbury the season was again abnormal. The severe winter and phenomenally wet spring delayed the beginning of the irrigation season until early December, an unbroken dry spell until the middle of January caused a short but heavy water demand, but abnormal rains in February reduced this to a minor figure long before the season usually ends.

On the schemes in Central Otago where agreements are in force the position was much the same as last year, the area watered being 43,711 acres. On the Omakau Scheme, where water is supplied on the demand system, 7,400 acre-feet of water was sold. The total area irrigated was 52,711, and the revenue amounted to £26,650.

In Canterbury there was a sharp decline in consumption due to the wet season, but other factors such as man-power and materials scarcity continued to retard development.

The total area irrigated was 2,400 acres, and the revenue amounted to £467.

No new construction has been undertaken during the year except that required to complete the Rangitata Diversion Race, which will supply water for power generation at Highbank as well as for irrigation.

No further construction progress has been possible on the Downs Water-supply Scheme because of the lack of suitable pipes, but the completed portion of the scheme (93 per cent. of its total) has continued to give excellent service.

Maintenance of this and all other works either in operation or unfinished has been continued on a reduced scale.