

C. CONSTRUCTION

1. POWER-STATION

Construction of the main dam at Cobb by the Ministry of Works is proceeding. Lake Little Sylvester was controlled to provide additional storage.

2. SUBSTATIONS

66 kV.

Blenheim. A 5 mVA., 33 kV. voltage regulator was put into service on 22nd July. Reactive metering was installed and came into operation on 1st January.

Motupipi. An automatic earthing switch and restricted earth leakage protection were installed and put into service during October.

3. TRANSMISSION AND DISTRIBUTION

The difficult portion of the 66 kV. Inangahua-Waimangaroa line was located, the profile well advanced, and a camp was established at Demmiston. Approximately 60 per cent. of the structures on the Inangahua-Blackwater 66 kV. line have been erected to date, 114 structures being erected, nine miles of track formed, and 30 acres of bush felled this year. Profile plans were rechecked and numerous deviations were made to all lines to improve structure positions.

4. GENERAL

A motor service depot was completed and is in operation.

DESIGN AND PROJECT PLANNING

(a) HYDRAULIC AND STRUCTURAL SECTIONS

See report of Ministry of Works.

(b) ELECTRICAL SECTION

Power-stations. -Detailed drawings of Maraetai have been continued and are nearing completion. The layout of the permanent village reticulation and lighting was worked out and material ordered.

Generator, transformer, and turbine specifications were prepared and tenders called for Whakamaru. Specifications of the control board for the 220 kV. switching-station were completed and an order placed in New Zealand. Detailed work continued on the cabling and equipment for this switching-station. To allow for the same set being used on all machines, modifications were made to the design of carbon-dioxide fire-protection equipment being bought for Arapuni.

The report on the efficiency tests at Karapiro was completed and further tests made on the high-speed field reducing system.

New governor oil-pumps were ordered for Tuai and work done on the proposal to modify the generator bearing oil-circulating system at Piripaua.

Design work for the Cobb extensions continued and a specification was prepared for the control and relay boards and equipment.

The details of the extensions to the Stoke Diesel Station were completed and the commissioning test supervised.

For Waitaki, drawing alterations necessitated by the installation of No. 5 machine were brought up to date and work was done on alterations for the proposed installation of units Nos. 6 and 7.

A large number of details of cabling and supports, &c., and other equipment for Tekapo, were designed.

The generator, transformer, and turbine specifications were finalized and tenders called for Roxburgh. A start was made on the preparation of specifications for the outdoor switchgear and control gear.