

2. SUBSTATIONS

Stoke.—The installation of a new 6,000 kVA. T.C.O.L. transformer-bank and controls was completed and put into service on 13th May.

Motupipi.—The 3,750 kVA. transformer-bank, ex Stoke, was installed and put into service in June.

Motueka.—The 2,250 kVA. transformers from Motupipi were installed and went into service in June. A 2,250 kVA. 11,000-volt regulating-transformer was put into service on 23rd January.

Blenheim.—A 66/33 kV. 5,000 kVA. transformer-bank, ex Addington Substation, was dried out, installed, and put into operation on 9th October.

3. TRANSMISSION AND OTHER LINES

Stoke—West Coast Line.—All plans and surveys, including necessary deviations, were completed, and materials began to arrive. Some bush-clearing contracts have been let.

Second Cobb—Stoke Line.—Survey and plans for the line have been completed.

4. WORKSHOP

The Nelson workshop building is still in the hands of the contractors, but the 30 ton overhead travelling crane and other workshop equipment is being installed.

DESIGN AND PROJECT PLANNING

(a) HYDRAULIC SECTION

Karapiro.—The checking of ground-water levels in the vicinity of the dam, with special reference to the valley of the Karapiro Stream, continued. Conditions are now stable, and only periodic inspections need be made.

Maraetai.—Almost all detailed designs have been under action. Design for the diversion tunnel and spillway, and drawings of the main penstocks, were practically completed, and it is hoped to call tenders soon for the main spillway gate and the penstocks. Several drawings of the dam were completed which involved detailed investigation of the effects of cooling mass concrete. Work on this is now well advanced, and detailed procedures for cut-off and consolidation groutings having been decided, the necessary drawings and specifications were issued. Design and investigation work was done on the main intake gates, screen structures, &c., which are particularly big structures requiring very careful analysis. The Department of Scientific and Industrial Research assisted with hydraulic model tests to enable detailed studies of the spillway to be nearly completed. The Department has been asked to make tests on special features of the intake gates.

Whakamaru.—Investigations proceeded, and proposals for this station are nearly completed. Final design work should commence soon.

Waipapa and Atiamuri.—Investigation has been pushed ahead on further sites on the Waikato at Waipapa and Atiamuri. Topographical and geophysical surveys have been carried out, and preparations are in hand to drill the sites. Access roads and camps have been established.