

C. CONSTRUCTION

1. POWER-STATIONS

King's Wharf.—A 20 mVA. 22/6.6 kV. transformer bank with its associated switch-gear and control gear was commissioned in January. The installation of a second bank is proceeding.

Maraetai and Whakamaru.—For progress on civil engineering construction see Ministry of Works report.

The diversion tunnel at Maraetai was completed in July, and concreting of the power-house was commenced in December. The Mangakino Bridge was completed in August.

An office of the State Hydro-electric Department was established at Mangakino in October to take charge of the electrical construction work. The main transformers for Maraetai have arrived at Tokoroa, and the assembly of oil-storage tanks and low-tension switchboard panels is in hand.

At Whakamaru, excavations for the diversion cut and the power-house bench were commenced in December, and the site of the outdoor station was levelled.

Geo-thermal Investigations.—A camp has been set up at Taupo by the Ministry of Works preparatory to commencing geo-thermal investigations.

Waikaremoana.—See Ministry of Works report for the sealing of the leaks at the main lake and other constructions.

2. SUBSTATIONS

(a) 220 kV.

Otahuhu.—Work completed includes subsoil drains in the outdoor station, installation of an oil interceptor, erection of fifteen permanent and one construction houses, and underground reticulation for electric-power and telephones in the permanent village. The installation of the oil-drains was half completed, a start made with the condenser building contract, and machines installed in the construction workshops. A 30 mVA. 110/22 kV. transformer bank was dried out, placed on a temporary foundation, and filled with oil.

New Bunnythorpe.—Work carried out by the Ministry of Works includes the second oil-interceptor tank, roading, the completion of all but one of the 220 kV. tower foundations, six sets of 220 kV. O.C.B. pads, and turntable pit and laying of the rails on the main traverser track. On the contract for the control and condenser building about 65 per cent. of the boxing and 70 per cent. of the concrete work has been completed.

The nine remaining 110 kV. O.C.B.s were dried out, filled with oil, and bushings with current transformers fitted to seven. Five sets of 220 kV. O.C.B.s have been set on to their pads and bushings installed into four sets.

Haywards.—The Ministry of Works completed the first excavation contract of 135,000 cubic yards in May, 1949. A second contract of 200,000 cubic yards, which will excavate the area down to formation level, was half-completed. The area for the temporary stores building was levelled.

(b) 110 kV.

Mount Roskill.—The 22 kV. bus was extended by a cable to a temporary building outside the switchroom and an extra 22 kV. feeder switch was installed.

Henderson.—The installation of standard control panels and increased rupturing capacity 11 kV. O.C.B.s was completed.

Hamilton No. 2.—The switchroom building was completed in February, and the erection of the new 11 kV. switchgear has started.