

A Telemark water-level transmitting-indicator was also installed and went into service in April.

A shed was built to house the oil-filtering equipment, which installation is now complete. A post-drilling machine and a small air-compressor were also installed in the power-house.

A rock wall was built along the river-bank to protect road access to the garages, and a parapet and guard-rail were placed on top of the river wall in front of the power-house.

A two-stall departmental garage and a multi-stall staff garage in reinforced concrete were completed and a four-roomed annex with bathroom has been built to supplement the hostel accommodation. An army hut has been erected to serve as a first-aid room.

Concrete paths have been laid at all cottages in the village, and preparations are being made for the necessary fencing.

(b) Substations

Stoke.—Two 3,000-gallon Diesel fuel-tanks were installed, a new 2,400 gallon water-cooling system connected, and transformer oil-pipes laid.

Blenheim.—The two additional cottages were completed and occupied by September. In October a local service 33/4 kV. transformer was connected in and the 400-volt services changed over. 66 kV. lightning arresters were mounted and connected in.

Motupipi.—In February an 11 kV. voltage regulator was installed to regulate the supply to the Golden Bay Cement Works, but as control equipment was not immediately available this regulator was not put into automatic operation for several months.

Motueka.—The new permanent 11 kV. switchgear was erected and went into service on 22nd March.

Tarakohe.—In May a three-phase 300 kVA. 11/4 kV. transformer was installed temporarily pending the delivery of the permanent 750 kVA. transformer, the installation of which was completed in August, and it was put into service, with new metering-equipment, in September, in parallel with the 1200 kVA. bank.

(c) Transmission-lines

Stoke-Blackwater Transmission-line.—Work on the survey of this line has continued throughout the year.

DESIGN AND PROJECT PLANNING

(a) CIVIL AND HYDRAULIC SECTION

Karapiro.—Apart from miscellaneous design details, the principal work has been the preparation of specifications and the supervision and checking of contracts, particularly for the scroll cases, headgates, spillway gates, together with their operating equipment. A close liaison with the Public Works Department's construction Engineer and the Resident Engineer on the works has been maintained.

Maratai.—An arch dam has been designed for this station, and excavations being made are to be examined before the proposal is committed.

A river-diversion procedure has been worked out and the tunnel and accessories, except for details, have been designed.

Work is in hand on all the principal works, including headgates, penstocks, flood spillway, and spillway gates.