

6. PLANT AND MOTOR-VEHICLES

Plant.—New tractors arrived during the year, but line-maintenance work still requires new tractors fitted with winches and blades. Three new concrete-mixers also were received. The demand for plant, including pumps, compressors, and tools, has been met reasonably well despite the difficult situation still existing. Workshop plant replacements for Tuai, and new plant for the Napier Depot, have been on order a long time, but there is no prospect of early delivery. The transfer of the Bay View vehicle repair depot to Taradale Road will allow for greater facilities there. A noteworthy addition for transport of heavy machinery to power-stations and substations is the Dyson Trailer, capable of carrying 50 tons.

Vehicles.—Difficulty is still being experienced in meeting the heavy demand for transport, and, although a few were delivered during the year, more new vehicles are needed. Some 2-ton trucks were taken over from the Army authorities, but more have yet to come. As the average age of vehicles is increasing, maintenance is heavy, and this, together with a lack of spare parts, causes delay.

C. CONSTRUCTION

1. POWER-STATIONS

Karapiro.—No. 1 30,000 kW. generating-unit was first put on commercial load on 10th April, 1947, but the guide-bearing gave trouble and the machine was not put into regular operation on full load until 21st April. No. 2 generator was completed in September, and was put into regular operation on full load on the 21st of that month. Work on No. 3 generator neared completion.

Maratai.—Work was continued on the sealing of access roads, erection of accommodation and community buildings in Mangakino Village, excavation of the power-house site and dam-abutments, and excavation and lining of the diversion tunnel and the gate and lift-shafts. During the year 685 ft. of tunnel was excavated to full size, and 450 ft. of barrel lined, excluding the invert. An additional 450 ft. of arch lining was completed. All this work was carried out by the Public Works Department.

Whakamaru.—Investigations to determine the nature of the foundations for the dam and other structures were continued and are nearing completion.

Waipapa and Atiamuri.—Preliminary survey work was carried out. Arrangements are in hand for drilling to commence at Atiamuri.

Kaitawa.—Steady progress was maintained with the installation of Nos. 6 and 7 generating-units. During April, 1948, it was possible to run No. 7 machine on test and later to contribute 10,000 kW. to the system loading. The non-arrival of governor parts prevented full machine running.

The main work undertaken by the Public Works Department was the removal of the rock barrier between the intake and the lake. Advantage was taken of the low level of the lake to expedite this work, which has been substantially completed, and particularly successful.

2. SUBSTATIONS

(a) 220 kV.

Otauhu.—Work on the substation-site has been chiefly preliminary preparation for construction. Temporary quarters for workers and construction buildings are well established. The sewerage system which will serve both temporary and permanent inhabitants is close to completion. A start was made on the condenser-building foundations. The outdoor-station site has been levelled, and drainage work is proceeding. Investigation and levelling work was carried out in connection with landing-stage on Tamaki River for transporting heavy equipment from the Auckland wharves.