

*Waihou*.—The permanent control panels were installed in October, and emergency buswork was erected for the spare transformer of the 110/50 kV. bank.

*Woodville*.—The installation of high-tension switchgear and the 1,000 kVA. transformer was completed.

*Fernhill*.—The substation building was completed.

*Waverley*.—Pending delivery of the transformer and structure, temporary apparatus was installed to give supply in April, 1950.

*Longburn*.—The main building was about 90 per cent. completed and is available for use.

(c) 50 kV.

*Wellsford*.—A site was selected for this new substation.

*Takapuna*.—Increased rupturing capacity 11 kV. O.C.B.s were installed.

*Belmont*.—The installation of relay panels was completed, and alterations were made to the 50 kV. bus.

*Maungatapere*.—The installation of a 6,500 kVA. synchronous condenser from Stratford with its building and associated equipment proceeded.

*Kaitia*.—No. 2 1,500 kVA. synchronous condenser and its control equipment was commissioned and a 750 kVA. 50/11 kV. transformer bank installed.

*Kaikohe*.—A 3 mVA. 50/11 kV. transformer bank was installed.

*Huntly*.—New 11 kV. incoming and local service O.C.B.s and new control panels were installed in March.

*Te Awamutu*.—The transformer capacity was increased to 4,000 kVA. in May by the addition of two 500 kVA. three-phase transformers.

*Whakamaru*.—A 50/11 kV. substation was put into service in February to supply construction works.

*Gisborne*.—Preliminary steps to the acquiring of the land have been taken.

*Tokomaru Bay*.—A site was selected for the station.

*Te Kiri*.—A regulating transformer was installed.

(d) General

Additional accommodation has been provided for staff at various substations. Work has also been done on the provision or extension of water-supply and sewerage services.

### 3. TRANSMISSION AND DISTRIBUTION

(a) 220 kV. Lines

*Whakamaru-Otahuhu*.—Foundations have been completed for all but fourteen of the 510 towers on the east line and 291 towers have been erected. Three miles of air-strip matting were laid to provide access in swamp country. Work on access roading and tree-cutting commenced on the west line.

*Whakamaru-Maraetai*.—Foundations were completed for the twenty-five towers on the west line, and twenty towers were erected. All but one of the twenty-six foundations for the east line also were completed.

*Whakamaru-Bunnythorpe*.—Construction camps have been built at Tihoi, Kurutau, Turangi, and Hihitahi. A bridge was built over the Mangaonoki Stream, and lateral access tracks to tower sites were formed with the aid of a bulldozer. A start has been made on tower foundations.

*Bunnythorpe-Haywards*.—The field survey work has been completed. Three miles of roads have been formed in the mountainous bush section behind Paraparaumu. Middle line proclamations covering the routes near Otaki and Waikanae were prepared.

*Linton Steel Depot*.—5,696 tons of tower steel were received and 3,562 tons despatched to the field. Due to the lack of parts to complete tower sections, 5,082 tons of steel still remain at the depot. Forty-eight tons of aluminium cable steel reinforced were received.