

(d) General

Work was continued on the reticulation of the Mangakino and Whakamaru areas. By extension of the existing 11 kV. lines more settlers were given supply in the Waikaremoana area.

Sixty-ton gantries were erected in the railway yards at Ngahauranga and Paekakariki Stations and used during the transport of the Bunnythorpe condenser parts.

Investigation of the routes of the deviations of lines required when the Hayward Substation goes into service were made.

4. COMMUNICATIONS

The installation of the Claudelands–Penrose three-channel carrier-telephone system was completed, finalizing the major North Island carrier network and providing vastly improved facilities for load-despatch work.

Further circuit improvements were effected by the installation of two single-channel power-line carrier systems between Bunnythorpe and Tuai, and an open-wire single-channel carrier system between Tuai and the Napier office.

Survey commenced on the proposed Whakamaru–Bunnythorpe telephone-line.

Emergency power-supplies for the operation of communication equipment were arranged.

A water-level radio transmitter was installed at Turangi in September. This equipment transmits the level of the Tongariro River to the system control office at Hamilton every six hours, and so shows any variation in the flow of this river into Lake Taupo.

5. GENERAL

Proposals have been made for necessary additions and alterations to the Napier District Office.

Office accommodation at Auckland was materially improved when 500 square feet of space occupied by the Auckland Electric-power Board was relinquished.

The rearrangement of Palmerston North office following vacation of the wing previously occupied by the Ministry of Works is under way. A temporary stores building of 2,400 square feet was erected in the Palmerston North yard.

At the Taradale Road Depot, Napier, a workshop, blacksmith's shop, store, petrol-tanks, and four cottages have been completed, while work is well advanced on another store, cottage, carpenter's shop, and pump-house.

SOUTH ISLAND SYSTEM

A. SYSTEM OPERATION AND LOAD DESPATCH

1. LOAD

The maximum half-hourly demand on the combined interconnected system, which includes the Dunedin City Corporation plants and other auxiliaries, was 166,188 kW. at 1700 hours on Wednesday, 21st July, 1948, an increase of 3·4 per cent. on the previous year's peak of 160,700 kW.

The total generation for the combined system was 819 million units, an increase of 10·4 per cent. on the previous year's output of 742 million units. The greatest weekly generation was 16,976,973 units (previous year, 16,177,871) during the week ending 25th July, and the highest daily generation was 2,683,617 units (previous year 2,591,713) on Wednesday, 21st July, 1948.

As was the case in 1947, considerable difficulty was experienced in 1948 in maintaining adequate coal-supplies for auxiliary stations.

General hydraulic conditions and the additional storage available in Lakes Pukaki and Mahinerangi enabled the year to pass without the application of severe restrictions.