

(c) 66 kV.

Addington.—To provide urgently required office accommodation for the load-despatch personnel, the linemen's quarters at Waipara were transferred to Addington, altered, reconditioned, and provided with the necessary services and equipment, including a newly-designed large-scale system mimic diagram.

Arahura.—The installation of the new 5 mVA. T.C.O.L. transformer-bank was commenced.

Ohai.—Rebuilding was completed and a 2,250 kVA. bank of transformers and regulator were installed.

Methven.—The 66 kV. outdoor structure has been erected and transformer foundation pads constructed. The 5 mVA. T.C.O.L. transformer-bank ex Dobson was overhauled at Addington and delivered to site. Installation of transformers, indoor 11 kV. switchgear, and control equipment is proceeding.

Papanui.—Land was acquired at Greer's Road, Papanui, for the proposed new major substation to serve the northern part of the Christchurch metropolitan area.

(d) 33 kV.

Southbrook.—An additional O.C.B. was installed, to control the line to Culverden.

3. TRANSMISSION LINES

A possible route for the proposed Roxburgh-Christchurch 220 kV. line was investigated. A start was made on construction of the first section from Gore to Edendale of the Gore-Invercargill 110 kV. line, and a camp was almost completed at Edendale. The line survey of the Gore-Roxburgh 110 kV. line was almost completed.

Thirty-two miles of new line were completed on the Hororata-Addington 66 kV. line, and in the Sockburn area the three existing lines were reconstructed to form, with the new line, two double-circuit suspension sections. The 12.42 miles of the Highbank-Methven 66 kV. line were constructed, but is not in service pending completion of the Methven Substation. Possible routes for the proposed multi-circuit steel-tower lines from the Christchurch 220 kV. terminal to Addington, Papanui, and North Canterbury are being investigated.

Four and a half miles of line on concrete poles were constructed from Kaitangata to Stirling to connect a 500 kW. steam auxiliary station at Kaitangata Coal-mines to the main system via the Otago Electric-power Board's system.

4. COMMUNICATIONS

The new line from Addington to Hororata is nearly completed, and on the south trunk building of a new line from Addington to Glenavy is proceeding.

Provision of emergency radio communication between vital points is in hand.

NELSON-MARLBOROUGH SECTION

A. SYSTEM OPERATION AND LOAD DESPATCH

1. LOAD

The maximum half-hourly demand on the system was 9,996 kW. on Friday, 25th July, at 10.00 hours. This is 21 per cent. higher than the previous year's peak of 8,240 kW., while the increase in units generated was 26½ per cent. The maximum number of units generated in any one week was 1,152,995 for the week ended 6th July, 1947. The system annual load factor was 59 per cent., and of the total units generated 6.7 per cent. were not accounted for.