

3. TRANSMISSION AND DISTRIBUTION

(a) 110 kV. Lines

The erosion on the south bank of the Waitaki near a tower which carries the Glenavy-Oamaru A and B lines was intermittent throughout the year. Floods during September washed away a considerable portion of the bank. After the floods the main stream moved over to the north bank and erosion practically ceased. Remedial measures have been and are being taken to protect this tower.

(b) 66 kV. Lines

A deviation of about 2 miles in the Otira-Arahura line near Turiwhate was surveyed and bush cleared from the route. The deviation is necessary, as the original route was endangered by the Taramakau River. The deviation of the transmission telephone-line in this locality was completed.

(c) 11 kV. Lines

Three A.B. switches were erected at Addington to enable paralleling of the Barrington Street feeders. An A.B. switch was inserted in both the Lyttelton No. 2 and the Harbour Board No. 1 feeders.

A temporary 19/13 copper overhead line was run to the boys' high school to cope with the increased load in this locality. All joints were located and marked with cable bricks on the Milton 1 and 2A and B feeders.

The southern feeder in the Middleton Yard was diverted to allow reconstruction of the railways to proceed.

Temporary lines in Russley Road were dismantled.

(d) Distribution

Southland.—This has been a busy year on distribution-lines, but only sporadic maintenance has been carried out. This, however, has included fairly extensive tree-cutting.

The work of changing over East Gore from 3.3 kV. to 11 kV., which actually is a rebuild of the distribution on concrete poles, is practically completed. Also, a change-over of South Invercargill from 3.3 kV. to 11 kV. involving rerouting and rebuilding on concrete poles is well in hand.

For practically the whole of the year the available distribution gangs were engaged on lines extensions. A new feeder has been built from Ohai Substation to feed the Morley and Wairaki State Mines and the Linton Mine. Some 493 new consumers were connected, necessitating 63 miles of new lines. Several lineworks and new sawmills have been connected to the system. A good deal of regrouping of existing consumers has been carried out. Numbers of transformer and A.B. switch poles, as well as defective ones, have been replaced by concrete poles. Material shortages and shortage of labour still prevent many prospective consumers from being supplied with power.

(e) Consumers, &c.

A period of ten complete financial years of State ownership and administration of the Southland electric-power supply matured on 31st March, 1947, and the occasion is an appropriate one to comment upon the progress made in that time by State enterprise governing the generation, reticulation, and retail and wholesale distribution of electric power in the Southland District, which is the most widespread electric-power district in the Dominion. For this purpose the following figures for the year ended 31st March,