

(c) *General*

Voltage control has improved in the far northern districts following the installation of the first condenser at Kaitaia, and further improvement is to be expected when the second machine is brought into service.

Operation of Power Board feeder switches for load restriction entailed considerable overtime being worked by substation operators.

3. TRANSMISSION AND DISTRIBUTION

Several outages occurred during the year. Mostly they were occasioned by fires, lightning, and other normal causes. The following incidents only are of interest :—

(a) *110 kV. Lines*

Arapuni—Ongarue.—One conductor was severed by a .303 rifle bullet.

Woodville—Greytown.—On the 7th April a pole was broken off at ground-level during a north-westerly gale, causing an interruption to the whole system.

Woodville—Napier.—One pole was split by lightning from 10 ft. below the crossarm.

Khandallah—Mangahao.—Three outrages of interest occurred; one was caused by bird-droppings on the insulators, one by the misuse of a metallic tape near the line, and another by a child shooting a wire over the line with an arrow. The persons concerned were not injured.

(b) *50 kV. Lines*

Bombay—Kerepehi.—New wire was spliced in at several points. A good many strands had been found broken by vibration and abrasion and insulators were beginning to split due to corrosion of the pin thimbles.

Hamilton—Huntly.—After many years of satisfactory service, the original insulators are now beginning to deteriorate fairly rapidly and are being replaced.

Karapiro—Hamilton.—The Karapiro—Mystery Creek section was cut out in February and is to be dismantled.

(c) *11 kV. Lines*

Hutt Nos. 1 and 2 lines have been completely re-insulated, following the large number of failures of the original insulators fitted in 1925.

(d) *General*

The intense growth of gorse on lines in the vicinity of Wellington cannot be economically controlled by slasher work, and patrol tracks were bulldozed through in a number of places.

The Karapiro—Leamington—Hautapu double-circuit 11 kV. line of 8 miles and the substation at Hautapu were taken over by the Cambridge Electric-power Board on 1st January.

4. COMMUNICATIONS

The supervisory control systems have operated satisfactorily. Noise-correction work on the North Auckland line has been completed as far as Maungatapere. Alarm and communication facilities at a number of substations were modernized.

Reconstruction of the Masterton—Woodville telephone-line continued, and a resurvey of the Napier—Waipawa section is being carried out. A new exchange was put into service at the Palmerston North office.