

Twelve reports of bad workmanship were received up to the end of July, and the action taken was as follows: One name was removed from the register; one provisional license was withdrawn; the certificate was endorsed for bad workmanship in one case; six wiremen were censured; and in three of the cases the offence occurred before the Act came into force, and no action could be taken.

ELECTRICAL SUPPLY AND WIRING REGULATIONS.

The Advisory Committee set up in 1925 to assist with the revision of the regulations issued under section 2 of the Public Works Amendment Act, 1911, have completed their deliberations, and the two sets of regulations—viz., the Electrical Supply Regulations, 1927, and the Electrical Wiring Regulations, 1927—were gazetted on the 12th July, 1927.

The Advisory Committee held their first meeting on the 12th November, 1925, and had forty-three meetings, the majority of which were held on Monday evenings from 7 p.m. till 10 p.m. The thanks of the Department are due to the members of the committee for their hard work in connection with drafting the regulations and for devoting so much of their spare time and expert knowledge in the interests of the electrical industry.

Suggestions have been drawn from all sources, and regulations in use in other countries have been studied and the information obtained adapted to local conditions, the result being the most complete and comprehensive electrical regulations the Department have ever had. It is hoped by their adoption to further increase the present high factor of safety and immunity from danger to life and property without increasing the cost as a whole to the public. Modern developments in the industry and increasing knowledge have resulted in the relaxation of certain requirements of the existing regulations, while experience had dictated a tightening-up in certain directions.

The Wiring Rules which have heretofore been incorporated in the Department's regulations were those issued by the Council of Fire and Accident Underwriters' Associations of New Zealand. It has been patent for some time that these required revision and that more consideration should be given to interests other than those of the insurance companies. It is anticipated that the new Wiring Regulations will prove acceptable to all parties concerned, and will reduce the present high cost of installations without in any way increasing the risk to the insurance companies. It is hoped that the cost of wiring will be further reduced when the Wiremen's Registration Act has been in operation long enough to raise the standard of the work carried out, and thus permit the use of less costly methods of installing conductors.

Both sets of the regulations were well perused by the interested parties—viz., the Electrical Supply Authority Engineers' Association, the Electrical Traders' Federation, and the Fire Underwriters' Association. Valuable suggestions were received from each body, and they are in agreement with practically the whole of the regulations as now issued.

Briefly, the main alterations from the existing regulations are:—

(a) Electrical Supply Regulations.

Frequency: The permissible variation infrequency has been reduced from $2\frac{1}{2}$ per cent to $1\frac{1}{2}$ per cent; this will mean better regulation of the speed of motors, resulting in more satisfactory service to those industries where an invariable speed is an important factor.

Extension of lines on demand: The regulation governing the condition under which a consumer or group of consumers can demand an extension of a licensee's lines has been completely redrafted to further protect the interests of the licensee and the ratepayers against the erection of lines which may otherwise prove unprofitable.

Erection of lines: Complete sag and tension tables for the stringing of lines, calculated and prepared by this office, have been included, to guard against lines being erected under too great a stress, and consequent danger to the public by breakage.

Feeder protection: Provision has been made for the installation of earth leakage relays for overhead lines. Such relays are designed to operate in the event of a leakage to earth, thus protecting the public from the danger of fallen live wires.

Employees safeguards: Additional safeguards have been specified to protect the employees of the licensee while engaged in their duties.

Post and Telegraph requirements: The requirements of the Post and Telegraph Department and Railway Department where power-wires cross or are adjacent to the wires of these Departments, have been clarified and made more definite. In view of higher standards of construction now required, some of the requirements at telephone crossings have been somewhat relaxed. Lithographs of the standard drawings of both the Post and Telegraph Department and the Railway Department, showing types of construction to be adopted where overhead crossings occur, have been included in the appendix.

Clearances: The clearances above ground-level have in certain cases been reduced, thus slightly reducing the cost of construction without in any way lessening their safety, and safe clearances between lines have been specified.

Strength of supports: Figures have been included for the working-strengths of timber supports of overhead lines, thus ensuring uniformity of practice and eliminating the possibility of poles being overstressed in some cases.

Bare wires: Provision has been made for the use of bare wires in certain areas where covered wires were previously required, thus decreasing the cost of construction.

Responsibility clause: The regulation defining the responsibility of the licensee for the safety of lines and apparatus has been clarified, removing an ambiguity which has hitherto caused discussion and dissatisfaction among licensees.

Existing installations: Provision has been made whereby a licensee can supply an installation which previously had its own plant, without requiring the complete rewiring of the installation in some cases, provided the installation is safe.