

Regulations under Section 2 of the Public Works Amendment Act, 1911.

JELlicoe, Governor-General.

ORDER IN COUNCIL.

At the Government House at Wellington, this 9th day of October, 1922.

Present :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

IN pursuance and exercise of the powers and authorities conferred on him by section two of the Public Works Amendment Act, 1911, and of every other power and authority enabling him in this behalf, His Excellency the Governor-General of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of that Dominion, doth hereby revoke the regulations made under section two of the Public Works Amendment Act, 1911, and published in the *New Zealand Gazette* of the twenty-fifth day of September, one thousand nine hundred and nineteen, and doth hereby make the following regulations in amendment thereof or in substitution therefor for the purposes of the said section; and doth hereby declare that this Order in Council shall come into operation on the date of the publication thereof in the *New Zealand Gazette*.

REGULATIONS.

INTERPRETATION.

IN these regulations the following words and phrases shall have the meanings attached to them respectively:—

- “Conductor” means any wire or cable used for the transmission of electric energy.
- “Consumer” means any body or person supplied or entitled to be supplied with electrical energy by the licensee.
- “Consumer’s wires” means any electric line or lines on the consumer’s premises which are electrically connected with the licensee’s electric distribution-lines.
- “Earthed” means connected to the general mass of earth in such a manner as to ensure at all times an immediate and safe discharge to earth of electric energy.
- “Electric line” means any wire, wires, conductor, or other means used for conveying electricity for power, lighting, or heating purposes; and includes any instrument, insulator, casing, tubing, pipe-covering, or pole enclosing or supporting an electric line, or anything connected therewith.
- “Electric distribution-line” means that portion of the system to which electric service-lines are connected for the purpose of supplying consumers.
- “Electric service-line” means the line which connects consumers’ premises with an electric distribution-line.
- “Extra-high pressure” means any pressure in excess of 6,600 volts.
- “High pressure” means any pressure over 650 volts but not in excess of 6,600 volts (between phases).
- “Low pressure” means any pressure up to and including 650 volts.
- “Inspecting Engineer” means and includes any Inspecting Engineer authorized by the Minister to inspect electric lines.
- “Licensee” means any local authority, company, body, person, or persons authorized under the Public Works Act or any other Act to lay, construct, put up, place, or use any electric line.
- “Minister” means Minister of Public Works.
- “Pressure” means the difference of potential between any two conductors through which a supply of energy is given, or between any part of any conductor and the earth.
- “Public Works Engineer” means the Engineer in charge of the Public Works district in which the area of supply is situated.
- “Street” includes road.
- “Substation” means any building, structure, or enclosure, either above or below ground, and containing transforming or converting apparatus for the supply of energy.
- “Telegraph” includes telephone.
- “Telegraph-line” has the same meaning as “electric line” in the Post and Telegraph Act, 1908, and also includes all telegraph, telephone, and electric signal wires belonging to the Government Railways Department.

A. Regulations prescribing the conditions on which licenses may be issued and the fees payable thereon:—

1. FREQUENCY.

The frequency of alternating-current systems shall be 50 complete cycles per second.

2. SYSTEMS OF SUPPLY.

The supply of electric energy shall be given on one or more of the following systems:—

- (a.) Two-wire system at a nominal pressure not exceeding 230 volts, measured at the consumer’s terminals—
- (1.) Direct current.
 - (2.) Single-phase alternating current.
- (b.) Three-wire system at a nominal pressure not exceeding 460 volts between the outer conductors and 230 volts between each outer and intermediate conductor, measured at the consumer’s terminals—
- (1.) Direct current.
 - (2.) Single-phase alternating current.
- (c.) Three-phase four-wire system, at a nominal pressure not exceeding 400 volts between phases and 230 volts between each phase and neutral conductor, measured at the consumer’s terminals.
- (d.) High or extra-high pressure alternating single-phase two-wire supply to motors, motor generators, pole transformers, transformers placed in street-boxes or in substations, together with a supply from the pole transformers or substations to a low-pressure system or systems as defined in subclauses (a) and (b) of this clause.
- (e.) High or extra-high pressure alternating-current three-phase supply to motors, motor generators, rotary converters, pole transformers, or transformers placed in substations, together with a supply from the pole transformers or substations to a low-pressure system or systems as defined in subclauses (a), (b), and (c) of this clause.
- (f.) High or extra-high pressure two-wire direct-current supply to motors and motor generators.
- (g.) Series street-lighting for any pressure not exceeding 3,300 volts.
- (h.) Direct-current supply at a pressure not exceeding 650 volts with the negative pole earthed.
- (i.) Such other systems as may be authorized by the Minister.

3. VOLTAGE OF SUPPLY.

- (a.) For purposes of lighting, heating, and domestic supply not exceeding 3 kilowatts the pressure shall not exceed 230 volts at the consumers’ terminals, and for supply to other services exceeding 3 kilowatts and motors of any capacity the pressure shall not exceed 460 volts at such terminals.
- (b.) Supply for power for industrial purposes may be given at high or extra-high pressure not exceeding 11,000 volts either for transformation or for direct supply to motors; provided that the transforming apparatus and control gear are so enclosed as to be inaccessible except to authorized persons.
- (c.) Supply for series street lighting may be given for pressures up to but not exceeding 3,300 volts.

4. REGULATION OF PRESSURE AND FREQUENCY.

The pressure shall be maintained within 5 per cent. above or below the nominal pressure at the consumers’ terminals; and on complaint by any consumer that the variation in voltage exceeds the limits specified, or on the instructions of the Inspecting Engineer, the licensee shall connect a portable recording voltmeter, to be provided and maintained by the licensee, to record the pressure between the service-lines. If the variations thus recorded exceed the above limits the licensee shall take immediate steps to comply with this regulation. The frequency shall be maintained within 2½ per cent. above or below the standard of 50 cycles per second.

5. LOCATION OF OVERHEAD LINES.

One side of every street shall be left free by the licensee for telegraph-lines.

Except by permission of the Minister of Telegraphs, or subject to an agreement between the Post and Telegraph Department and the licensee, all overhead electric lines shall be placed on the opposite side of the street to that on which any telegraph-lines exist; and where the erection of the overhead electric lines necessitates an alteration of any existing telegraph-lines, and such alteration is approved by the Minister of Telegraphs, the expense of the alteration shall be borne by the licensee: Provided that where existing telegraph-lines owned by the Post and Telegraph Department occupy both sides of a street at the same place that Department shall bear the cost of putting all telegraph-lines on the one side of the street, or consent to an arrangement for the joint use of poles on both sides of the street.

In running the electric lines along a street where no telegraph-line exists the licensee shall keep to one side of the street, and in running electric service lines to the opposite side of the street such lines shall be erected at such a height and in such a manner as not to obstruct any future telegraph-lines.

6. FACILITY FOR SERVICE CONNECTIONS, ETC.

Where electric distribution-lines are on one side of the street and telegraph-lines on the other, and service is required to be given from either to the other side, the licensee