

on behalf of the said Board for injury done to the works herein authorized by the construction, management, or working of any such public work as aforesaid, or for the loss occasioned thereby, or for the exercise of any such right or power as aforesaid.

16. This license shall come into force on and after the publication thereof in the *New Zealand Gazette*.

J. F. ANDREWS,
Clerk of the Executive Council.

License authorizing Todd Brothers and Company (Limited) to erect Electric Lines on the Road on the Western Side of the Heriot Railway-station Yard and across the Road and Railway at the North End of the Station Yard.

LIVERPOOL, Governor.

ORDER IN COUNCIL.

At the Government House, at Wellington, this thirtieth day of January, 1914.

Present :

HIS EXCELLENCY THE GOVERNOR IN COUNCIL.

WHEREAS by section two of the Public Works Amendment Act, 1911, it is provided that no person shall lay, construct, put up, place, or use any electric line except under the authority of a license issued to him by the Governor in Council under that Act :

And whereas Messrs. Todd Brothers and Company (Limited) (hereinafter referred to as "the said licensee") desires to erect electric lines on the road on the western side of the Heriot Railway-station yard and across the road and railway at the north end of the station yard (hereinafter referred to as "the said electric lines"), and it is expedient accordingly to issue a license in respect thereof under the said section :

Now, therefore, in pursuance and in exercise of the powers conferred on him by the said section, and of all other powers in anywise enabling him in this behalf, His Excellency the Governor of the Dominion of New Zealand, acting by and with the advice and consent of the Executive Council of the said Dominion, doth, subject to the conditions set forth in the Schedule hereto, hereby authorize the said licensee to erect and maintain the said electric lines for the purpose of supplying electricity to the premises marked 1, 2, 3, 4, 5, and 6 on the plan marked P.W.D. 34679, deposited in the office of the Minister of Public Works, at Wellington, in the Wellington Provincial District, such electric lines being indicated by a red line on the said plan.

SCHEDULE.

CONDITIONS.

1. In this license—

"Minister" means Minister of Public Works :

"Inspecting Engineer" means the Engineer or other officer appointed by the Minister for the purpose of inspecting the work to be constructed or maintained by the said licensee hereunder.

2. The conductors shall be at a minimum height of 20 ft. above the surface of the ground and may be uninsulated.

3. The conductors shall be composed of stranded copper or aluminium. The size of the strand shall be not less than No. 20 standard wire gauge, and the number of strands shall not be less than seven.

4. The potential difference between the two wires or between either wire and the earth shall not exceed 110 volts direct current.

5. The main switchboard shall be made of and be mounted on material that is non-inflammable.

6. All outgoing feeders and distributors from the generating-station shall be provided with automatic circuit-breakers or fuses, set to open circuit at 50 per cent. excess current over the rated full load of such feeder or distributor with a time-limit not exceeding ten seconds.

7. Every support for an aerial line shall be of durable material, and properly strengthened against forces due to wind-pressure, change of direction of the line, and unequal length of span. The factor of safety of such supports shall be at least four, taking into consideration all possible stresses, including wind-pressure at 30 lb. per square foot on plane surfaces and 18 lb. per square foot on cylindrical surfaces. The stress in the aerial conductors shall not exceed 25,000 lb. per square inch for copper and 12,500 lb. per square inch for aluminium in the extreme case of a temperature of 12° F. and a wind-pressure of 18 lb. per square foot of diametrical plane occurring simultaneously.

8. The said electric-light lines shall occupy the other side of the road to that taken by the existing telegraph and tele-

phone lines, and all future extensions shall be run on one side only of roads or streets.

9. No work of any nature shall be erected or constructed upon, over, or under any part of the New Zealand Government Railways until the said licensee has obtained the consent of the Minister of Railways thereto as required by section 4 of the Government Railways Amendment Act, 1910 (No. 2).

10. Where lead-covered telephone-cables or any open telegraph or other aerial wires are crossed above or beneath by the said electric-light lines, the latter wires shall be insulated with not less than 300-megohms-per-mile grade of vulcanized rubber throughout the crossing-span, and over every such span they shall be suitably suspended from effectively earthed steel bearer-wires, if the Minister of Telegraphs shall so require. If required by the Minister of Telegraphs, efficient guard-wires or other protective devices shall be erected at crossings and places where electric-light wires intersect telegraph wires, or wherever such protection is deemed necessary. The licensee shall bear the cost of carrying out such protection.

Earth-wires, where led down poles, shall be protected by casing for a distance of 8 ft. from the ground.

11. All aerial wires shall be attached to suitable insulators, carried on cross-arms of suitable material and cross-section, and they shall be so attached to the insulator, or guarded, that they cannot fall away from the support. Conductors covered with insulating-material shall be so attached that their insulation will not be impaired where they are secured to the insulator.

12. An aerial line shall be removed so soon as it has ceased to be used for the transmission of electricity, unless the said licensee intends within a reasonable time again to take it into use.

13. Where an aerial line crosses or is in proximity to any metallic substance, precautions shall be taken against the possibility of the line coming into contact with the metallic substance or of the metallic substance coming into contact with the line by breakage or otherwise.

14. Every aerial line, including its supports, its conductors, and their insulating covering, and all the structural parts and electrical appliances and devices belonging to or connected with the said electric line, shall be duly and efficiently maintained as regards both electrical and mechanical conditions.

15. Service lines from aerial lines shall be taken from insulators, and shall not be tapped off between insulators. They shall be led as directly as possible to insulators firmly attached to some portion of the consumer's premises which is not accessible to any person without the use of a ladder or other special appliance. Every portion of any service line which is outside a building and within 7 ft. of any part of the building shall be rubber insulated.

16. Service wires shall not be less than No. 12 S.W.G. if solid, or 7/20 S.W.G. if stranded.

17. All metal pipes or coverings containing any electric line or wires shall be efficiently connected with earth, and shall be so jointed as to make good electrical connection throughout their whole length.

18. The said licensee shall be responsible for all electric lines, fittings, and apparatus belonging to him, or under his control, which may be upon a consumer's premises, being maintained in a safe condition and in all respects fit for supplying energy.

19. In delivering the energy to a consumer's terminals the said licensee shall exercise all due precautions so as to avoid risk of causing fire on the premises.

20. All electric lines and apparatus on a consumer's premises, excepting such parts as are required to be connected to earth shall be highly insulated and be suitable for the voltage at which supply is being given. They shall be thoroughly protected against injury to the insulation and against the access of moisture, and any metal forming part of the electric circuit shall not, unless efficiently connected with earth, be exposed so that it can be touched. All electric lines shall be so fixed and protected as to prevent the possibility of electrical discharge to any adjacent metallic substance.

21. A suitable safety-fuse or other automatic circuit-breaker shall be inserted in each service line within a consumer's premises as close as possible to the point of entry, and contained within a suitable locked or sealed receptacle of fireproof construction.

22. The wiring shall be done from distributing-boards which shall be of incombustible material. Suitable fuses at each pole, fitted to engage in spring clips, shall be placed on these boards so that it shall be possible to disconnect any or all circuits from the supply. If double-pole switches are used on the distributing-board circuits, fuses need not then be of the type to engage in spring clips.

23. There must be an approved porcelain bridge or other efficient insulation between the terminals of lamp-holders, and where lamp-holders are liable to be handled by persons