

8. The Council is hereby authorized to construct, maintain, and use the following works for the purposes of this license, the position of the said works being indicated on the plan marked P.W.D. 35061 hereinbefore referred to:—

- (a.) Headworks consisting of a dam and necessary intake.
- (b.) Water-race leading from such dam to the power-house hereinafter referred to.
- (c.) A power-house with all necessary equipment, including water-turbines, generators, transformers, lightning-arresters, switchboards, switches, exciters, and other appliances for generating electricity. Such equipment shall be suitable for and capable of generating electrical energy equal to 160 kilowatts.
- (d.) Transmission and other lines over the routes shown by means of lines and small circles on the said plan.
- (e.) Such further transmission and other lines within the Borough of Ohakune as at present constituted as may from time to time be required within such borough after compliance with the provisions of clause 49.

9. The Council shall have the right at any time or times during the continuance of this license, with the consent of the Minister, to enter upon any road or other land, whether vested in or occupied by the Crown or any other person or body corporate, and there to construct, erect, lay down, maintain, renew, or repair all such transmission-lines, poles, or other things as are required for the transmission of electricity between the generating-station and any of the substations to which this license applies.

10. The Inspecting Engineer, both during and after the construction of the works, shall have free access to and liberty at any time to inspect the same so as to ensure that the provisions of this license are given due effect to.

11. After the said works have been completed the Council shall maintain the same in proper working-order during the continuance of this license.

12. The Council is hereby empowered to take, under the Public Works Act, 1908, as for a public work, such land as may, in the opinion of the Governor, be necessary to enable the Council to construct and maintain the various works authorized by this license.

13. Nothing herein shall prevent the Governor in Council from granting to any person or body corporate other than the Council a license to take water from any portion of the said river except at the place where the Council is by this license empowered to take it, provided that no such license shall so operate as to reduce the volume of the water which the Council is by this license authorized to take from the said river.

14. If the Council fails or neglects—

- (a.) To use or maintain the said works after completion so as to secure the full benefit of the undertaking; or
- (b.) To observe any of the conditions or obligations herein imposed—

then and in any such case the Council shall be liable to a fine of £50 for every week or part of a week during which such default or neglect continues, or the Governor may by Order in Council revoke this license.

15. Notwithstanding anything in the last preceding clause this license shall not be revoked and no proceedings shall be taken for the recovery of a fine in respect of the breach thereof unless and until notice in writing of the intention so to revoke the license or to take such proceedings has been served upon the Council or placed upon some principal or conspicuous part of the works, and default has been made by the Council in repairing or remedying the breach or breaches specified in the said notice for the following periods:—

- (a.) For any breach which in the opinion of the Governor can be met by a fine, for thirty days after the service of such notice.
- (b.) For any breach which in the opinion of the Governor is of such a nature as to require the revocation of this license, for ninety days after the service of such notice.

16. Nothing herein contained shall be deemed in any way to limit any rights or powers vested in His Majesty the King, or in the Governor on his behalf, or otherwise under any Act of the General Assembly authorizing the construction, management, or working of any public work, nor shall His Majesty, or the Governor, or any person on his behalf, be liable to pay to the Council any compensation for injury done to the works herein authorized by the construction, management, or working of any such public work as aforesaid, or for loss occasioned thereby, or for the exercise of any such right or power as aforesaid.

17. The Council may at any time, with the consent of the Minister, surrender this license, and shall thereupon, if so required by the Minister, remove from the ground all removable equipment, machinery, buildings, poles, transmission-

lines, and other plant herein authorized to be installed or provided. If the Council neglects or fails so to remove the said plant within twelve months after being required so to do, such equipment, machinery, buildings, poles, lines, and other plant shall, without payment or compensation, vest in and become the property of the Crown.

18. The terms and conditions of this license may at any time or from time to time, at the request or with the consent in writing of the Council, be altered by the Governor by Order in Council.

19. With respect to the transmission and other lines authorized to be erected by this license, and to the transmission and supply of electricity in pursuance thereof, the following special provisions shall apply:—

System of Supply.

20. Electrical energy shall be generated in the form of three-phase alternating current, at a frequency of 50 cycles per second and pressure not exceeding 2,700 volts between phases, for transmitting from the generating-station to the transformer substations, and in its distribution within the area of supply. The neutral point of one or more of the generators in service shall be earthed.

The low-tension distribution shall be on the three-phase four-wire system, one phase wire and the neutral being used for single-phase service. The neutral point of the secondary windings of all distribution transformers shall be effectively earthed at the site of the transformer.

Low-tension distribution voltages shall be approximately 400 volts between phase wires and 230 volts from any phase wire to the earthed neutral.

Supply to street-lighting incandescent lamps and to private consumers for lighting purposes shall be at 230 volts.

Regulation of Pressure.

21. The pressure shall be maintained within 4 per cent. on lighting-distributing circuits above or below the declared pressure at the consumers' terminals. The Council shall supply a suitable recording voltmeter for this service, and on complaint by any consumer that the variations in voltage exceed these limits, or on the instructions of the Inspecting Engineer, the Council shall connect a recording voltmeter to record the pressure between the lines at their entrance to the consumers' premises, and shall supply to the Inspecting Engineer a chart showing the variations in voltage between the lines at this point for a period of seven consecutive days. If the variations thus recorded exceed the above limits the Council shall take immediate steps to comply with this regulation. If after thirty days a similar chart shows that the above limits of variations in voltage are not complied with a breach of these regulations shall be deemed to have been committed. If the accuracy of the Council's recording voltmeter is questioned by the consumer a standard instrument shall be supplied by the Inspecting Engineer, the reading of which shall be accepted as final.

Switchboards.

22. All switchboards shall be made of and mounted on material that is not inflammable, and no switchboard conductor shall carry electric current at a density exceeding 1,000 amperes per square inch. No conductor at a pressure above 600 volts shall be exposed on the front of any switchboard, and the back of any switchboard carrying exposed conductors at a pressure over 600 volts shall be screened off and accessible only to authorized persons.

All power-house and substation switchboards shall be provided with two efficient and independent earth connections connected in parallel, to one of which all frames, instrument-cases, and other metal parts shall be connected. Means shall be provided for testing the resistance between these two connections through the earth. Such tests shall be made at least once a month and recorded.

Circuit-breakers.

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

Distribution.

24. The distribution may be carried out either by underground or overhead conductors. Provided that if at any time it is deemed by the Minister to be detrimental to the public safety for the conductors or any particular class of conductors to be overhead, such conductors shall, on receipt of notification to that effect from the Minister and within ten months of such notification, be laid underground, and all consequent and necessary alterations made by and at the cost of the Council.