

CHAPTER 237.

ELECTRIC LIGHTING.

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THE ELECTRIC INSTALLATION REGULATIONS*

made by the Governor and Court of Policy on the 23rd September, 1907, and amended on the 19th July, 1927, 23rd March, 1928, 8th November, 1929, and 20th November, 1930.

Regs. 23rd
Sep., 1907.
19th July,
1927.
23rd Mar.,
1928.
8th Nov.,
1929.
20th Nov.
1930.
Short title.

1. These regulations may be cited as the Electric Installation Regulations.

Interpre-
tation.

2. In these regulations, unless the context otherwise requires—

*“ the order ” means the Georgetown Electric Lighting Order, 1899, and the New Amsterdam Electric Lighting Order, 1900, as the case may be;

“ the Undertakers ” means the Undertakers for the purpose of the order;

“ consumer ” means any person or body of persons, whether incorporated or not, supplied or entitled to be supplied with energy by the Undertakers;

“ consumer’s wires ” means any electric lines on a consumer’s premises which are connected with the service lines of the Undertakers at the consumer’s terminals;

“ aerial line ” means any electric line which is placed above ground and in the open air;

“ pressure ” means the difference of electrical potential between any two conductors through which a supply of energy is given, or between any part of either conductor and the earth; and

(a) where the conditions of the supply are such that the pressure may at any time exceed 550 volts if continuous or 250 if alternating, but cannot exceed 4,500 volts whether continuous or alternating, the supply shall be deemed a high pressure supply;

Regs. 8th
Nov. 1929.

* The regulations originally applied only to “ all installations, machinery and apparatus made or used under the Georgetown Electric Lighting Order, 1899, or the New Amsterdam Lighting Order, 1900,” (original regulation 3, now replaced by the present regulation made in 1927); but the Georgetown Electric Lighting Order, 1899, has ceased and been determined (Cap. 238, s. 5 (6) and Order in Council 27th May, 1927), and the New Amsterdam Lighting Order, 1900, has expired. The regulations now apply to “ any licence or order made under the Electric Lighting Ordinance, or any Ordinance amending or to be construed with the same or to any special Ordinance ” (see present regulation 3).

They, therefore, apply to the Georgetown Electric Supply Order printed under chapter 238 and to the Bartica Electric Supply Order printed immediately after these regulations.

(b) where the conditions of the supply are such that the pressure may on either system exceed 4,500 volts, the supply shall be deemed an extra high pressure supply;

“ high pressure ” and “ extra high pressure ” respectively are used in relation to electric lines, conductors, circuits and apparatus according to the conditions of the supply delivered through the same or particular portions thereof.

Where these regulations require any metallic body to be “ efficiently connected with earth ” it shall be connected with the general mass of earth in such manner as will ensure at all times an immediate and safe discharge of electrical energy.

Other expressions to which meanings are assigned in the order or in the Electric Lighting Ordinance have the same respective meanings in these regulations.

3. These regulations shall apply to any licence or order made under the Electric Lighting Ordinance, or any Ordinance amending or to be construed with the same or to any special Ordinance.

Application.
Regs. 19th
July, 1927.

PART I.—LICENCES TO ERECT INSTALLATIONS.

4. (1) No person, who is not registered as the holder of a licence under this Part of these regulations, shall make or erect any installation, erect any machinery or apparatus, or effect any repair, renewal, addition or modification or any re-installation to which these regulations apply.

Installations,
etc., to be
done by reg-
istered hold-
ers of
licences.
Regs. 23rd
March, 1928.

(2) In this regulation the expression “ person ” includes a servant of the Undertakers.

Regs. 23rd
March, 1928.

5. (1) Applications for licences are to be made in writing to the Government electric inspector and shall contain the full name, age, occupation and address of the applicant.

Applications
for and
granting of
licences.
Regs. 23rd
March, 1928.

(2) In order to obtain a licence an applicant must satisfy the Government electric inspector of his general knowledge of the art and practice of electrical wiring and installation, and of any work to which the Electric Installation Regulations in force for the time being apply.

Regs. 23rd
March, 1928.

(3) The Government electric inspector shall cause to be kept a register of persons to whom licences have been granted under this Part of these regulations.

Regs. 23rd
March, 1928.

Regs. 20th
Nov. 1930.

(4) The Government electric inspector may remove from the register the name of any person who in his opinion has not complied with or has contravened any of these regulations or who in his opinion has been guilty of misconduct or neglect of duty, or has otherwise become unfit to continue to hold a licence. Any such licensee may appeal from the decision of the Government electrical engineer to the Director of Public Works, and the Postmaster General. A holder of a licence who has been informed in writing by the Government electric inspector that his name has been removed from the register shall forthwith return his licence to the Government electric inspector for the purpose of cancellation.

Penalty.

Regs. 23rd
March, 1928.

6. Any person who contravenes any of the provisions of this Part of these regulations shall be liable to a penalty not exceeding twenty-four dollars.

PART II.—REGULATIONS AS TO FIXING INSTALLATIONS.

Notices to Electric Inspector.

Consumer to
give notice
to inspector.

7. (1) Any consumer or wiring contractor intending to have any installation, machinery or apparatus, extensive repair, renewal, or re-installation to which these regulations apply made or erected shall give to the electric inspector not less than three days' notice in writing of such intention:

Provided that where not more than four lamps are intended to be added to any installation already existing twenty-four hours' notice shall be sufficient.

Undertakers
to give notice
to inspector.

(2) The Undertakers shall give to the electric inspector not less than forty-eight hours' notice in writing of their intention to bring into use any installation, machinery or apparatus, extensive repair, renewal, or re-installation to which these regulations apply:

Provided that where not more than four lamps are intended to be added to any installation already existing ten hours' notice shall be sufficient.

Regulations as to Wiring.

Wiring in
dry places.

8. (1) In dry places wires shall have a rubber, or combined fireproof and weather proof insulating covering to be approved by the electric inspector, and when an insulating covering of the latter class is used the fireproof covering must be on the outside. They shall be rigidly supported on non-combustible, non-absorptive insulators, which separate the wires at least $\frac{1}{2}$ inch from the surface wired over, and the wires shall be kept apart at least $2\frac{1}{2}$ inches.

(2) In places, such as factories, sugar houses, packing houses, stables or buildings specially liable to moisture or acid or other fumes liable to injure the wires or their insulation, wires shall have a rubber insulating covering approved by the electric inspector. They shall be rigidly supported on non-combustible, non-absorptive insulators, which separate the wire at least 1 inch from the surface wired over, and they shall be kept apart at least 2½ inches.

Wiring in damp places.

9. Wires shall be separated from contact with walls, floors, timbers or partitions through which they may pass, by non-combustible, non-absorptive insulating tubes which must be long enough to bush the entire length of the hole in one continuous piece, and project at least ¼ inch on either side, shall be kept free from contact with gas, water or other metallic piping, or any other conductors or conducting material which they may cross, by some continuous and firmly fixed non-conductor, creating a separation of at least one inch. Wires shall be run over, and not under, pipes upon which moisture is likely to gather, or which are liable to leakage. No smaller size of wire than No. 14 Brown and Sharp gauge shall be used for any lighting or power work:

Wires to be separated from contact with walls, floors, etc.

Provided that smaller wire may be used for fixture work, if provided with approved rubber insulation.

10. Wires shall be so spliced or joined as to be both mechanically and electrically secure without solder; they shall then be soldered to ensure preservation and the joints covered with an insulation equal to that on the conductors.

Joints in wires.

11. All wiring on side walls shall be protected from mechanical injury; and when crossing floor or overhead beams in places where they might be exposed to injury, the wires shall be attached by their insulating supports to the under side of a wooden strip not less than 1 inch thick and 3½ inches wide.

Wiring on overhead beams, etc.

12. Moulding work should always be done with rubber-covered wire approved by the electric inspector. This class of work shall never be done in concealed or damp places or where the difference of potential between any two wires in the same moulding is over 250 volts.

Moulding work.

13. For concealed knob and tube work wires shall have an approved insulating covering; shall be rigidly supported on non-absorptive, non-combustible insulators which separate the wires at least 1 inch from the surface wired over; shall be kept

Concealed knob and tube work.

at least 10 inches apart except by permission of electric inspector, and when possible should be run singly on separate timbers or studdings; shall be separated from contact with the walls, floors, timbers and partitions through which they may pass by non-combustible, non-absorptive insulating tubes.

Conduit work.

14. For conduit work wires shall have an approved rubber insulating covering, and the two or more wires of a circuit shall be drawn into the same conduit. Metal conduits shall be continuous from one joint box to another or to fixtures and shall be permanently and effectually grounded. Every outlet shall be equipped with an approved outlet box or plate. At junction boxes and all outlets the conduit shall be provided with an approved bushing so fitted as to protect the wires from abrasion. Junction boxes shall always be installed in such a manner as to be accessible. All elbows or bends shall be so made that the conduit or lining of same will not be injured. The radius of the curve of the inner edge of any elbow shall not be less than $3\frac{1}{2}$ inches. Where sections of metal conduit are installed, they must be bonded together and joined permanently and efficiently to the ground.

Wiring of fixtures.

15. For fixture work, wires shall have an approved rubber insulating covering and shall not be less in size than No. 18 Brown and Sharp gauge; shall when fixtures are wired outside be so secured as not to be cut or abraded by the pressure of the fastenings or motion of the fixture. Fixtures shall when supported by any grounded metal work of a building, be insulated from such metal work by means of approved insulating joints. Fixtures shall have all burrs or fins removed before the conductors are drawn in; shall be tested for "contacts" between conductors and fixtures, for "short-circuits," and for ground connections before it is connected to its supply conductors. Under no circumstances shall there be a difference of more than 250 volts between wires contained in or attached to the same fixture.

Flexible tubing.

16. Flexible tubing: In cases where it is impossible to rigidly support the wiring on porcelain or glass insulators in concealed places, the wires, if not exposed to moisture may be fished on the loop system if encased throughout in approved continuous flexible tubing. Only approved rubber covered wire shall be used for this class of work.

Flexible cord for pendant lamps.

17. (1) Flexible cord for pendant lamps shall be made of stranded copper conductors, and each stranded conductor shall be covered by an approved insulation and protected from

mechanical injury by a tough, flameproof, braided outer covering. In this class is included all flexible cord which, under usual conditions, hangs freely in air, and which is not likely to be moved sufficiently to come in contact with surrounding objects. Lamps provided with long cords so that they may be carried about or hung over nails or on machinery, etc., are not included in this class.

(2) Flexible cord for portable fittings shall have a waterproof insulation which shall be solid and at least $\frac{1}{32}$ inch thick and show an insulation resistance of at least 50 megohms per mile at a temperature of 70° Fahrenheit when immersed in water for at least twenty-four hours; and, in addition, shall be provided with a re-inforcing cover especially designed to withstand the abrasion it will be subject to in the uses to which it is to be put. In this class is included cords for use in unusually damp places, for portable lamps, and for small portable motors.

Flexible cord
for portable
fittings.

(3) For small portable heating apparatus, each stranded conductor must be covered as follows:

Flexible cord
for heating
apparatus.

- (1) A tight close wind of fine cotton.
- (2) A thin layer of rubber or other cementing material.
- (3) A layer of asbestos insulation.
- (4) A stout braid of cotton.

(5) An outer re-inforcing cover especially designed to withstand abrasion.

The object of the tight wind of cotton and cementing material is that it tends to prevent a broken strand puncturing the insulation and causing a short circuit.

(4) Flexible cords shall not be used for extensions through partitions or for wiring down to switches, etc.

18. Switches shall be mounted on porcelain sub-bases which will separate the wires at least half-an-inch from the surface wired over; should preferably plainly indicate on inspection whether the current be "on" or "off"; shall be marked with the current and voltage for which they are designed; shall "make and break" with a quick snap and not stop when motion has once been imparted by the button or handle. The handle or button or any exposed parts shall not be in electrical connection with the circuit; shall when used to control more than one incandescent lamp plainly indicate whether the current is "on" or "off."

Switches.

Lamp
sockets.

19. Sockets: In rooms where inflammable gases may exist, the incandescent lamp and socket must be enclosed in a vapour-tight globe and supported on a pipe-hanger wired with approved rubber covered wire soldered direct to the circuit. In damp places, or over specially inflammable stuff, waterproof sockets must be used. When waterproof sockets are used they should be hung by stranded rubber covered wires, not smaller than No. 14 Brown and Sharp gauge, these wires should be soldered direct to the circuit wires, but supported independently of them. When sockets are not attached to fixtures, the threaded inlet must be provided with a strong insulating bushing having rounded edges and all inside fins removed, so that in no place will the cord be subjected to the cutting or wearing action of a sharp edge.

Porcelain
knobs and
cleats.

20. Porcelain knobs and cleats must be sufficiently vitrified to prevent absorption of moisture and must be free from any sharp edges or projections likely to injure the wire, and they must not be screwed so tight as to crush the insulation of the wires they hold. Porcelain tubes must be free from rough projections and sharp edges, the ends of tubes should be rounded.

Rosettes.

21. Rosettes: The current carrying parts must be mounted on porcelain and the bases must be sufficiently high to keep the wires at least $\frac{1}{2}$ inch from the surface to which the rosette is attached and should have a porcelain lug under each terminal to prevent the rosette from being placed over projections which would reduce the separation to less than $\frac{1}{2}$ inch.

Fuses.

22. (1) Fuses shall be placed on all service wires as near as possible to the point where they enter the building on the inside of the walls and shall be provided with covers so as to obviate any danger of the melted fuse metal coming in contact with any ignitable substance.

(2) Wherever there is a change in the size of mains used a suitable fuse must be placed to protect that section.

Bath room
fittings.

23. Bath Room Fittings: Under no circumstances shall combined switches and lampholders be employed in bathrooms, the lamp must be placed in such a position as to be out of reach of a person standing in the bath, and the switch shall be placed outside the room.

24. In installations in cold stores the wires shall be run in moisture-proof conduit with damp proof lamp fittings screwed direct to the conduit and the wiring shall contain as few joints as possible. Cold stores.

25. In Warehouses: It is specially desirable that all lamps be fixed in clear positions where goods may not be piled against the lamps. Warehouses.

Motors.

26. Motors exposed to flyings or where installed in rooms where combustible materials are in process of manufacture or treatment, shall be completely enclosed in fireproof cases; this shall apply also to the motor rheostat. Motors installed near combustible materials.

27. Each motor shall be legibly marked with the volts and ampères it is designed to use at full load, and its speed, and shall be capable of being run for long periods at full load without dangerous heating. Shall be wired with the same precautions as for lighting purposes and the wires shall be so designed as to carry a current at least 25 per cent. greater than that required by the rated capacity of the motor. On 550 volt circuits approved rubber covered wire shall be used exclusively. Motors to be legibly marked.

28. Motors, when combined with ceiling fans, shall have an insulator interposed between the motor and its support. Ceiling fans.

29. (1) Motor-starting rheostats shall be plainly marked with current and voltage for which they are designed. Starting devices to be plainly marked.

(2) The terminals shall be marked to indicate to what part of the circuit each is connected as "Line," "Armature," "Field." A diagram showing all connections shall be served on the electric inspector. Diagram of connections to be hung up.

(3) "No-Voltage" and "overload" release devices shall be provided wherever required. "No voltage" release to be fixed when required.

30. Motors for driving organ bellows shall be installed in such manner and in accordance with such precautions as the electric inspector shall in each case specify. Organ motors to be fixed as required by inspector.

31. (1) Each motor and rheostat shall be protected by a cut-out, and controlled by a switch plainly indicating whether the current is "on" or "off." Motor switches.

All work to be approved by inspector.

(2) All installations, machinery, and apparatus must be approved by the electric inspector and special arrangements made wherever required.

Insulation.

32. Insulation: On circuits not exceeding 104 volts an insulation resistance of at least 15 megohms per lamp should be obtained. Certificates will not be issued for any new or repaired installations if the leakage current exceeds $\frac{1}{40000}$ of the total supply. No motor or heating device shall be connected to a circuit if its insulation resistance is below 500,000 ohms.

Power of Inspector.

Responsibility of Undertakers.

33. The Undertakers shall be responsible for all electric lines, fittings and apparatus, belonging to them or under their control, which may be upon a consumer's premises being maintained as closely as possible in accordance with these regulations.

Obstructing inspector.

34. Any installation, machinery or apparatus to which these regulations apply may be inspected at any reasonable time by the electric inspector who may for that purpose enter on the premises in which such installation, machinery or apparatus is situated. Any person obstructing the electric inspector in the execution of his duty under this regulation shall be liable to a penalty not exceeding \$24:

Provided that no inspection shall be made of the same installation, machinery, or apparatus oftener than once in every three months, unless in pursuance of a special order by the Governor in Council.

Undertakers to discontinue supply if apparatus unsafe.

35. The Undertakers shall, or at the request of the electric inspector shall, disconnect from their mains any consumer's premises on which the wires, fittings, or apparatus are not in a safe condition, and in all respects fit for supplying energy.

Wiring contractor to open all casing when required to do so by inspector.

36. The inspector may, when inspecting any machinery, apparatus, extensive repairs, renewal or re-installation, require the wiring contractor to open for examination any casing or concealed work and to replace and close up the same after the inspector has completed his inspection.

Penalty for Breach.

Penalty.

37. Any person making default in complying with any of these regulations shall be liable on summary conviction to a penalty not exceeding twenty dollars for each default.

38. No meter for recording the supply of energy shall be certified by the inspector as being correct if it varies from the standard more than three *per cent.* at any point above one-twentieth load. Meter testing.

PART III.—REGULATIONS AS TO SUPPLY OF ENERGY
BY UNDERTAKERS.

General Regulations for Securing the Safety of the Public.

39. The pressure of a supply delivered to any consumer for lighting purposes shall not exceed 250 volts at any pair of terminals, except with the express approval of the Governor in Council. Such approval will only be given for special purposes and on the joint application of the consumer and the Undertakers and the supply will be subject to such further regulations as the Governor in Council may from time to time prescribe. Pressure of supply to consumers.

40. The pressure of a supply delivered to a transforming station or to a transforming apparatus on a consumer's premises may exceed 250 volts but shall not exceed the limits of high pressure. Where it is desired to apply the high pressure voltage direct, without passing through a step-down transformer, application must first be made to the Government electric inspector who will examine the circumstances and lay down such conditions as may be necessary. Pressure of supply to transforming apparatus.
Regs. 8th Nov., 1929.

41. An extra high pressure supply shall not be given except to distributing stations or other premises in the sole occupation of the Undertakers, and with the written consent of the Governor in Council, and subject to such regulations and conditions as the Governor in Council may prescribe. Limitations of extra high pressure.

42. The maximum working current in any conductor shall not be sufficient to raise the temperature of the conductor or any part thereof to such an extent as to materially alter the physical condition or specific resistance of the insulating covering, if any, or in any case to raise such temperature to a greater extent than 30° Fahr. The cross sectional area and conductivity at joints must be sufficient to avoid local heating, and the joints must be protected against corrosion. Maximum current in conductors.

43. The sectional area of the conductor in any electric line laid or erected in any street after the date of these regulations shall not be less than the area of a circle of one-tenth of an inch diameter, and where the conductor is formed of a strand of wires, each separate wire shall be at least as large as No. 20 Standard wire gauge. Minimum size of conductors.

Specification
of insulating
material.

44. All material used for insulating electric lines or apparatus shall be of the best quality, and thoroughly durable and efficient, having regard to the conditions of its use. Suitable provision shall be made for the protection of the insulating material against injury or removal.

If the protection so provided be wholly or partly metallic, it shall be efficiently connected with earth.

Insulation
test of
electric lines.

45. Every electric line, other than a service line, shall be tested for insulation after having been placed in position, and before it is used for the purposes of supply, the testing pressure being at least 200 volts, and the Undertakers shall duly record the results of the tests of each line or section of a line.

Maintenance
of insulation.

46. The insulation of every complete circuit used for the supply of energy, including all machinery, apparatus, and devices forming part of, or in connection with such circuit, shall be so maintained that the leakage current shall not under any conditions exceed one-thousandth part of the maximum supply current; and suitable means shall be provided for the immediate indication and localization of leakage. Every leakage shall be remedied without delay.

Every such circuit shall be tested for insulation at least once in every week, and the Undertakers shall duly record the results of the testings.

Provided that where the Governor in Council has approved of any part of any electric circuit being connected with earth, the provisions of this regulation shall not apply to that circuit so long as the connection with earth exists.

High pressure
conductors
to be covered.

47. Every high pressure conductor laid or erected in any street after the date of these regulations shall be continuously covered with insulating materials to a thickness of not less than one-thirteenth part of an inch, and in cases where the extreme difference of potential in the circuit exceeds 2,000 volts, the thickness of insulating material shall not be less in inches or parts of an inch than the number obtained by dividing the number expressing the volts by 20,000.

Testing of
insulation of
all parts of
any high
pressure
circuit.

48. A high pressure circuit shall not be brought into use unless the insulation of every part thereof has withstood the continuous application during one hour of pressure exceeding the maximum pressure to which it is intended to be subjected in use, that is to say, in the case of every electric line a pressure

twice the said maximum pressure, and in the case of every machine, device, or apparatus, a pressure of 50 *per cent.* greater than the said maximum pressure.

The Undertakers shall duly record the results of each test.

49. Every high pressure electric line, conductor, or other apparatus shall be protected by a suitable automatic quick-acting cut-off:

Quick-acting cut-off for high pressure lines, etc.

Provided that it shall not be incumbent upon the Undertakers to provide such a cut-off for the outer conductor of a concentric main which is, with the approval of the Governor in Council, efficiently connected with earth.

50. In every case where a high pressure supply is transformed for the purpose of supply to one or more consumers, some suitable automatic and quick-acting means shall be provided to protect the consumer's wires from any accidental contact with or leakage from the high pressure system, either within or without the transforming apparatus.

Transformers.

51. Where any portion of any electric line or any support for an electric line is exposed in such a position as to be liable to injury from lightning, it shall be efficiently protected against such injury.

Protection from lightning.

52. Where any accident by explosion or fire, or any other accident of such kind as to have caused or to be likely to have caused loss of life or personal injury has occurred at any part of any electric line or work, the Undertakers shall give immediate notice thereof to the Governor in Council.

Accidents to be reported. Regs. 8th Nov. 1929.

The Undertakers shall also summon immediately to the scene of such accident the Government electric inspector.

Aerial Lines.

53. Every aerial line shall be attached to supports at intervals not exceeding 200 feet where the direction of the line is straight, or 150 feet where the direction is curved, or where the line makes a horizontal angle at the point of support.

Maximum intervals between supports.

54. Every support for an aerial line shall be of a durable material, and properly stayed against forces due to wind pressure, change of direction of the line, or unequal lengths of span. The factor of safety for aerial lines and suspending

Supports, construction and erection of.

wires shall be at least 6 and for all other parts of the structure at least 12, taking the maximum possible wind pressure at 50 pounds per square foot.

Every support, if of metal, shall be efficiently connected with earth.

Height from ground and distance from buildings, etc.

55. An aerial line shall not in any part thereof be at a less height from the ground than 18 feet, except by permission of the electric inspector, or in the case of works and lines not existing at the date of these regulations within 5 feet or in such cases as may be approved by the electric inspector 3 feet measured horizontally or 7 feet measured vertically from any building or erection other than a support for the line, except where brought into the building for the purpose of supply.

Service lines from aerial lines.

56. Service lines from aerial lines 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, and from this point of attachment they shall be enclosed and protected in accordance with the subsequent regulations as to electric lines on the consumer's premises. Every portion of any service line which is outside a building but is within 7 feet from such building shall be completely enclosed in approved insulating material.

Angle of crossing thoroughfares.

57. Where an aerial line other than one existing at the date of these regulations crosses a street the spans shall be as short as practicable.

Lines crossing metallic substance.

58. Where an aerial line crosses, or is in proximity to any metallic substance, precautions shall be taken by the Undertakers 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.

Suspending wires.

59. The electric inspector, except in the case of existing lines, may require every high pressure aerial line to be efficiently suspended by means of insulating ligaments to suspending wires, so that the weight of the line does not produce any sensible stress in the direction of its length, and all suspending wires, if of iron or steel, to be galvanised.

Discharge of pressure in case of fire.

60. In the case of any high pressure aerial line exceeding one-half mile in total length means shall be provided whereby the pressure may be discharged from any portion of the line erected

over or alongside of any building or buildings without loss of time in case of fire or other emergency.

61. Every aerial line, including its supports and all the structural parts and electrical appliances and devices belonging to or connected with the line, shall be duly and efficiently supervised and maintained as regards both electrical and mechanical conditions. Maintenance.

62. An aerial line shall not be permitted to remain erected after it has ceased to be used for the supply of energy, unless the Undertakers intend within a reasonable time again to take it into use. Disused aerial lines to be removed.

63. (1) Service wires shall be covered with an approved insulating covering which shall consist of at least three braids thoroughly impregnated with a dense moisture repellent, which will not drip at a temperature lower than 160° Fahrenheit. Service wires.

(2) Where the service wires enter a building they shall have drip loops outside, and the holes through which the conductors pass must be bushed with non-combustible, non-absorptive insulating tubes slanting upwards towards the inside.

64. Line wires, other than service wires, shall have a weather proof or rubber-insulating covering, to be approved by the electric inspector. Line wires.

65. All wires must be so spliced or joined as to be both mechanically and electrically secured, without solder. The joints must then be soldered to ensure preservation and covered with an insulation equal to that on the conductors. Joints.

66. Petticoat insulators shall be used exclusively for all outside work. Wires must not come in contact with any substance other than their insulating supports. All tie wires must have an insulation equal to that of the conductors they confine. Insulators and tie wires.

Electric Lines other than Aerial Lines.

67. All conduits, pipes, casings, and street boxes used as receptacles for electric lines shall be constructed of durable material, and where laid under carriage ways shall be of ample strength to prevent damage from heavy traffic; and reasonable means shall be taken by the Undertakers to prevent accumulation of gas in such receptacles. Construction of receptacle for electric lines.

Crossing
pipes, etc.

68. Where any electric line crosses, or is in proximity to any metallic substance, special precautions shall be taken by the Undertakers against the possibility of any electrical discharge to the metallic substance from the line or from any metal conduit, pipe or casing enclosing the line.

Electric
continuity of
metal
conduits,
pipes, or
casings.

69. All metal conduits, pipes, or casings, containing any electric line shall be efficiently connected with earth; and shall be so jointed and connected across all street boxes and other openings as to make good electrical connection throughout their whole length.

Precautions
against
charging of
short lengths
of pipes, etc.

70. Where isolated lengths of metal conduit, pipe, or casing are used for the protection of any electric line at road crossings or similar positions, special precautions shall be taken to prevent the possibility of any electrical charging thereof.

Precautions
to be taken
when bare
conductors
are used.

71. Where the conductors of electric lines placed in any conduit are not continuously covered with insulating material, they shall be secured in position, and no unfixed uninsulated material of a conducting nature shall be contained in the conduit. No such conductor shall be at a higher potential than 300 volts.

Adequate precautions shall also be taken to ensure that no accumulation of water shall take place in any part of the conduit, and to prevent any dangerous access of moisture to the conductors or the insulators.

In the case of any such electric lines laid in conduits after the date of these regulations, the insulators shall be so disposed that they can be readily inspected.

High pressure
lines laid
above
ground.

72. Every portion of any high pressure electric line placed above the surface of the ground, or in any subway not in the sole occupation of the Undertakers, shall be completely enclosed either in a tube of highly insulating material embedded in brickwork, masonry, or cement concrete, or in strong metal casing efficiently connected with earth.

High pressure
lines laid in
proximity to
other electric
lines or to the
surface of
the ground.

73. Where any high pressure electric line is laid beneath the surface of the ground, efficient means shall be taken to render it impossible that the surface of the ground or any neighbouring electric line or conductor shall become charged by leakage from the high pressure electric line.

Street Boxes.

74. In addition to the provisions contained in regulation 68 as to the construction of receptacles for electric lines, the following regulations shall be observed with respect to the construction of street boxes—

Street boxes.

(a) The covers of all street boxes shall be so secured that they cannot be opened except by means of a special appliance.

(b) The covers of all street boxes containing high pressure apparatus other than cables shall be connected to strips of metal laid immediately underneath the adjacent roadway, and efficient means shall be taken to render it impossible that the covers or other exposed parts of these boxes, or any adjacent material forming the surface of the street, shall become electrically charged, whether by reason of leakage, defect or otherwise.

(c) Where street boxes are used as transformer chambers, reasonable means shall be taken to prevent as far as possible any influx of water, either from the adjacent soil or by means of pipes; and in the case of any such street box exceeding one cubic yard in capacity, ample provision shall be made, by ventilation or otherwise, for the immediate escape of any gas which may by accident have obtained access to the box, and for the prevention of danger from sparking.

(d) All street boxes shall be regularly inspected for the presence of gas, and if any influx or accumulation is discovered, the Undertakers shall give immediate notice to the authority or Company whose gas mains are laid in the neighbourhood of the street box.

Transforming Stations.

75. Transforming stations or points in a system of distribution, in which a high pressure supply is transformed for the purpose of supply to a consumer, and which are not on the consumer's premises, shall be established in suitable places which are in the sole occupation and charge of the Undertakers.

Transforming stations.

76. Transformers must not be placed in any but metallic or other non-combustible cases. They shall, wherever possible, be erected on poles, and shall not be attached to the outside of buildings. In cases where it is impossible to exclude the transformer and primary wiring from entering the building the transformer shall be installed in a manner approved by the electric inspector.

Transformers to be placed on poles.

Consumer's Premises.

Responsibility of Undertakers for their lines etc., on consumer's premises.

77. The Undertakers shall be responsible for all electric lines, fittings, and apparatus, belonging to them or under their control, which may be upon a consumer's premises, being maintained in a safe condition and in all respects fit for supplying energy.

Treatment of electric lines and apparatus on consumer's premises.

78. All electric lines and apparatus placed on any consumer's premises shall be highly insulated and thoroughly protected against injury to the insulation or 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.

Transformers and high pressure apparatus to be enclosed in metal, etc.

79. Where the general supply of energy is a high pressure supply, and transforming apparatus is installed on a consumer's premises, the whole of the high pressure service lines, conductors, and apparatus, including the transforming apparatus itself, so far as they are on the consumer's premises, shall be completely enclosed in solid walls or in strong metal casing efficiently connected with earth and securely fastened throughout.

Connection to consumer's premises not to be made when leakage would result.

80. The Undertakers shall not connect the wires and fittings on a consumer's premises with their mains unless they are reasonably satisfied that the connection would not cause a leakage from those wires and fittings exceeding one ten-thousandth part of the maximum supply current to the premises; and where the Undertakers decline to make such connection they shall serve upon the consumer a notice stating their reason for so declining.

Discontinuance of supply on discovery of leakage on consumer's premises.

81. If the Undertakers are reasonably satisfied, after making all proper examination by testing or otherwise, that a leakage exists at some part of a circuit of such extent as to be a source of danger, and that such leakage does not exist at any part of the circuit belonging to the Undertakers then and in such case any officer of the Undertakers duly authorised by them in writing, or, if the Undertakers so require, an electric inspector may, for the purpose of discovering whether the leakage exists at any part of a circuit within or upon any consumer's premises, by notice require the consumer at some reasonable time after the service of the notice to permit him to inspect and test the wires and fittings belonging to the consumer and forming part of the circuit.

If on such testing the officer or the electric inspector discovers a leakage from the consumer's wires exceeding one ten-thousandth part of the maximum supply current to the premises, or if the consumer does not give all due facilities for inspecting and testing, the Undertakers shall forthwith discontinue the supply of energy to the premises in question, giving immediate notice of the discontinuance to the consumer, and shall not recommence the supply until they are reasonably satisfied that the leakage has been removed. This regulation shall not affect any power contained in the order or otherwise enabling the undertakers to discontinue supply.

82. If any consumer is dissatisfied with the action of the Undertakers in refusing to give or in discontinuing or in not recommencing the supply of energy to his premises, the wires and fittings of that consumer may, on his application and on payment of the prescribed fee, be tested for the existence of leakage by an electric inspector.

Appeal to
electric
inspector.

This regulation shall be endorsed on every notice given under the provisions of either of the two last preceding regulations.

Arc Lighting.

83. Arc lamps used in any street for public lighting shall be so fixed as not to be in any part at a less height than 10 feet from the ground.

Height from
ground.

Arc lamps used in any street for private lighting shall be fixed so as not to be in any part at a less height than 8 feet from the ground.

84. A cut-off switch, fixed in a suitable receptacle, shall be provided for every high pressure arc lamp, of such pattern and construction as will provide—

Cut-off
switch.

(a) that the lamp can by its means be entirely disconnected from the supply circuit;

(b) that the switch itself can be safely operated in the dark without special precautions; and

(c) that there shall be no danger of any injurious electrical arcing, sparking, or heating being caused by the operation of the switch.

BARTICA ELECTRIC SUPPLY ORDER.

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SCHEDULE.

AREA.

BARTICA ELECTRIC SUPPLY.**ORDER IN COUNCIL**

O. in C.
7 of 1940.
32 of 1952.

made on the 30th January, 1940, issued and delivered on the 11th March, 1940, and amended on the 31st July, 1952.

Short title.

1. This order may be cited as the Bartica Electric Supply Order.

Interpre-
tation.

2. This order is to be construed with the provisions of the Electric Lighting Ordinance, hereinafter referred to as the Ordinance, and the several words, terms and expressions to which by the Ordinance meanings are assigned shall in this order have the same respective meanings:

Provided that in this order the following expressions shall have the meanings hereby assigned to them—

“ applicant ” means any person, body of persons, company, institution, agent, etc., making application in writing to the Undertakers for a supply of electrical energy for any purpose whatsoever;

“ area ” subject to the provisions of this order shall be the whole of the area included in the schedule;

“ circuit ” means a number of conductors connected together for the purpose of carrying electric current;

“ conductor ” means a body or substance which offers a low resistance to the passage of an electrical current;

“ consumer ” means any person or body of persons supplied with energy by the Undertakers;

“ consumers terminals ” means the end of the service-line situated upon any consumer’s premises and to which the consumer’s installation is connected;

“ energy ” means electric energy and for the purposes of applying the provisions of the Ordinance to this order, electric energy shall have the same meaning as “ electricity ” defined in the Ordinance;

“ general supply ” means the normal supply of electrical energy to the public in general but shall not include any special supply to any particular consumer or consumers;

“ initiation of service ” means the commencement of the regular and continuous provision of the general supply authorised by this order;

“ inspector ” means the Government Electric Inspector or any assistant inspector of the Government Electric Inspector’s staff gazetted to discharge the duties of an inspector within the provisions of the Ordinance;

“ main ” means a conductor, or a set of conductors associated together, forming part of the distribution system between a generating station and a consumer’s service-line;

“ plan ” means a plan drawn to a horizontal scale of at least six inches to one mile;

“ power ” means electrical power (or the rate per unit of time at which energy is supplied);

“ private supply ” means supply of a special nature provided by the Undertakers for the particular requirements of any consumer or consumers;

“ the schedule ” means the schedule to this order annexed;

“ telegraph line ” means any circuit used by the Postmaster General in connection with the operations of the telecommunications service;

“ service ” means the regular and continuous provision of the general supply authorised by this order;

“ service-line ” means a conductor, or a set of conductors, connecting a main to a consumer’s installation;

“ unit ” means one kilowatt hour.

3. This order shall come into force and have effect upon the day when the same is issued and delivered by the Governor in Council to the Undertakers which date is in this order referred to as “ the commencement of this order.”

Commencement.

4. “ The Undertakers ” or “ the Company ” means Booker Brothers, McConnell and Company, Limited, its successors and assigns and shall include any person, local authority or body which may become entitled to carry on this undertaking under this order.

The Undertakers.

5. The Undertakers shall not at any time after the commencement of this order supply power or energy or except for the purposes of this order erect or lay down any electric lines or works beyond the area of supply otherwise than under the authority of the Governor in Council.

Prohibition of supply beyond area of supply.

6. Subject to the provisions of this order and of the Ordinance the Undertakers shall, within the area, have the exclusive right for a period of thirty years and of any extension thereof under the provisions of the Ordinance, to supply electric energy for

Duration of order. Power for execution of work.

any public or private purposes and are hereby subject to the provisions of this order and the Ordinance and any regulations for the time being in force, authorised and required to do all things necessary for the discharge of their obligations under this order.

Nature and Mode of Supply.

Character-
istics of
supply.

7. The essential features of the energy provided as general supply shall be—

(a) alternating current at a frequency of fifty cycles per second;

(b) single phase or three phase according to consumers' requirements;

(c) one hundred and fifteen or two hundred volts at the points of connection to consumers' installations as required by consumers;

(d) a maximum permissible deviation of two *per cent.* from the prescribed frequency of fifty cycles per second and of two and a half *per cent.* from the prescribed voltages of one hundred and fifteen or two hundred;

(e) non-interference with—

(i) the services conducted by the Postmaster General.

(ii) radio transmission or reception within or without the Colony.

Voltage of
private
supply.

8. In the case of private supply the Undertakers may with the prior approval of the Governor in Council provide energy having any desired characteristics provided that the voltage at the point of connection to any consumer's installation shall not exceed two hundred and twenty volts without the prior permission of the inspector.

General
supply to be
continuous.

9. (1) The Undertakers shall from the date of initiation of service make all reasonable efforts to ensure that the general supply shall be continuous and available for use at all times.

(2) The Undertakers shall send to the Governor in Council notice of every interruption which may be caused in any manner whatsoever in the general supply.

(3) The notice herein referred to shall be sent within twenty-four hours of the commencement of any interruption and shall state—

(a) the date and hour on which the interruption commenced;

(b) the cause or causes thereof;

(c) the steps taken or to be taken to effect the necessary resumption of supply as well as to prevent a repetition of the occurrence from the same or similar cause or causes.

If the Undertakers fail to comply with the provisions of this clause they shall be liable for each offence to a penalty not exceeding twenty-four dollars.

Works.

10. For the purpose of maintaining, extending or improving the Postmaster General's telecommunication services the Postmaster General shall have prior claim to the use of any street or other place in or on which he may require or desire to erect any lines or works, and no erection or construction of any lines or works by the Undertakers shall be effected without prior reference to the Postmaster General.

Postmaster
General's
prior claim
to use of
streets, etc.

11. (1) The lines, works, machinery, appliances, apparatus, and the like employed by the Undertakers under the provisions of this order or under the provisions of the Ordinance shall at all times be subject to the inspection and the approval of the inspector.

Lines, etc.,
subject to
inspection.

(2) If any difference arises between the Undertakers and the inspector the Undertakers shall have the right of appeal to the Governor in Council.

12. (1) All machinery, apparatus and appliances employed by the Undertakers within the provisions of this order or the Ordinance shall be so protected by adequate mechanical or electrical means as to eliminate all risk of damage or injury to life or property.

Protection
against
injury or
damage.

(2) If any difference arises between the inspector and the Undertakers with respect to the reasonableness of any requirements so made the Undertakers shall have the right of appeal to the Governor in Council.

13. Notwithstanding clause 12 any special safety measures recommended by the inspector shall be employed by the Undertakers:

Special
safety
measures.

Provided that if any difference arises between the Undertakers and the inspector the Undertakers shall have the right of appeal to the Governor in Council:

And provided further that if on report by the inspector the Governor in Council is satisfied that any measures deemed by the

inspector necessary or advisable for the safety of life and property and not employed by the Undertakers should be by them so employed the Governor in Council may after considering the representations of the Undertakers order such action to be taken as may to him appear expedient or advisable.

Compulsory
erection of
mains.

14. (1) The Undertakers shall at any time after the expiration of one year after the commencement of this order construct suitable and sufficient distributing mains for the purposes of general supply of electric power and energy throughout any street or part of a street or in any place within the area upon being required to do so in manner by this order provided.

(2) All such mains as last above mentioned shall be constructed by the Undertakers within six months after any requisition in that behalf served upon them in accordance with the provisions of this order has become binding upon them or such further time as may in any case be approved of by the Governor in Council.

Manner in
which re-
quisition is
to be made.

15. (1) Any requisition requiring the Undertakers to place distributing mains for the purposes of general supply throughout any street or part of a street or in any place within the area may be made by five or more owners or occupiers of premises along such street or part of a street or in any place:

Provided, however, that such owners or occupiers shall not own or occupy an area exceeding one-eighth of a square mile.

(2) Every such requisition shall be signed by the persons making the same or by the local authority as the case may be and shall be served upon the Undertakers.

(3) Forms of requisition shall be kept by the Undertakers at their office and a copy shall be supplied free of charge to any owner or occupier of premises within the area and to the local authority on application for the same and any requisition so supplied shall be deemed valid in point of form.

Requisition
by owners or
occupiers.

16. Where any such requisition is made by any such owners or occupiers as aforesaid the Undertakers may if they think fit within one month after the service of the requisition upon them serve a notice on all the persons by whom such requisition is signed stating that they decline to be bound by such requisition unless such persons or some of them will bind themselves to take or guarantee that there shall be taken a continuous supply of energy for a period of at least three years from the date thereof.

17. Where any such requisition is made by the local authority it shall not be binding on the Undertakers unless at the time such service is effected or within one month thereafter there is tendered to the Undertakers an agreement executed by the local authority and binding them to take for a period of three years at least a supply of energy for lighting such public lamps in the street or part of a street in respect of which such requisition is made as may be under their management or control.

Requisition
by local
authority.

18. (1) The Undertakers shall upon being required to do so by the owner or occupier of any premises situate within fifty yards of any main of the Undertakers in which they are for the time being required to maintain or are maintaining a supply of energy for the purposes of general supply under this order provide and continue to provide a supply of energy for such premises in accordance with the provisions of this order.

Furnishing
of supply of
energy to
owners and
occupiers
within area.

(2) Every owner or occupier of premises requiring a supply of energy shall—

(a) serve a notice upon the Undertakers specifying the premises in respect of which and the premises for which such supply is required and the day (not being an earlier day than a reasonable time after the date of the service of such notice) upon which such supply is required to commence;

(b) enter into a written contract with the Undertakers if required by them to do so to continue to receive and pay for a supply of energy for a period of at least three years; and

(c) give to the Undertakers if required by them to do so security for the payment to them of all moneys which may from time to time become due to them by such owner or occupier in respect of energy to be supplied by them:

Provided that the Undertakers may after they have given a supply of energy for any premises by notice in writing require the owner or occupier of such premises within seven days after the date of the service of such notice to give them security for the payment of all moneys which may from time to time become due to them in respect of such supply in case such owner or occupier has not already given such security or in case any security given has become invalid or insufficient and in case any such owner or occupier fails to comply with the terms of such notice the Undertakers may if they think fit discontinue to supply energy for such premises so long as such failure continues:

Provided also that if the owner or occupier of any such premises as aforesaid uses any form of lamp or electrical appliances or uses the energy supplied to him by the Undertakers for any purpose or deals with it in any manner so as to unduly or improperly interfere with the efficient supply of energy by the Undertakers to any other body or person the Undertakers may if they think fit discontinue to supply energy to such premises so long as such improper use continues:

Provided also that the Undertakers shall not be compelled to give a supply of energy to any premises unless they are reasonably satisfied that the electric lines, fittings and apparatus therein are in good order and condition and not calculated to affect injuriously the use of energy by the Undertakers or by any other body or person.

(3) If any difference arises under this clause as to any improper use of energy or as to any alleged defect in any electric lines, fittings or apparatus, such difference shall be determined by the inspector.

Penalty for
failure to
supply
energy

19. (1) Whenever the Undertakers make default in supplying energy to any owner or occupier of premises to whom they may be and are required to supply energy under this order they shall be liable to a penalty not exceeding five dollars in respect of every such default for each day on which any such default occurs.

(2) Subject to the provisions of any agreement or agreements which shall be subsisting between the Undertakers and the Council whenever the Undertakers make default in supplying energy to the public lamps to which they may be and are required to supply energy under this order they shall be liable to a penalty not exceeding twelve cents in respect of every such default for each such lamp and for each day on which any such default occurs.

(3) Whenever the Undertakers make default in supplying energy in accordance with the terms of any regulations and conditions subject to which they are authorised to supply energy under this order they shall be liable to such penalties as may by such regulations and conditions be prescribed in that behalf:

Provided that the penalties to be inflicted on the Undertakers under this clause shall in no case exceed in the aggregate the sum of one hundred dollars in respect of any defaults not being wilful defaults on the part of the Undertakers for any one day:

Provided also that in no case shall any penalty be inflicted in respect of any default if the court having cognizance of the case shall be of opinion that such default was caused by inevitable accident or *force majeure* or was of so slight or unimportant a character as not materially to affect the value of the supply.

20. Service lines shall be erected by the Undertakers at their own expense provided that the length in excess of fifty yards of any service line shall if so required by the Undertakers be paid for by the applicant.

Service lines—Allocation of costs.

Charges.

21. Charges for energy provided or for any other service rendered by the Undertakers under this order shall be assessed and paid for in British Guiana currency.

Charges to be assessed in British Guiana currency.

22. Consumers shall have the option of paying for energy consumed in direct proportion to the consumption thereof or in accordance with any special scale of charges which the Undertakers may offer. Such option shall in the first instance be exercised in the application to the Undertakers for a supply of energy and may not be revoked except by giving one clear calendar month's notice to the Undertakers.

Choice of system of payment for energy consumed.

23. (1) The Undertakers shall be entitled to charge consumers for electric energy supplied from general supply a price per unit not exceeding the following—

Charges for energy.

(1) during the period of two years after the initiation of service—25 cents per unit;

(2) during five years following that period—20 cents per unit;

(3) thereafter, during every successive year the maximum rate shall be reduced by one cent per unit until the rate per unit shall become 15 cents:

Provided that at any time during the duration of this order the Undertakers may offer such scales of charges on other than a *pro rata* basis to those consumers so desiring.

For energy provided as private supply the Undertakers may, subject to sections 18 and 19 of the Ordinance, charge such prices as may to them appear necessary or reasonable.

(2) Notwithstanding the provisions of this clause, the Undertakers shall be entitled to charge consumers for electric energy supplied from general supply at the rate of 18 cents per unit.

O. in C. 32 of 1952.

Meters.

Measure-
ment of con-
sumption of
energy
meters.

24. The consumption of energy supplied from the general supply shall be measured by meters situated on consumers' premises; provided that current limiters may be used in lieu of meters at the discretion of the Undertakers in which case the charges for supplying energy shall be based on the prevailing rate for energy and an assessed consumption which assessment shall be mutually agreed to by the consumer and the Undertakers and the minimum charge provided by clause 27 of this order shall not apply.

Types of
meters.

25. Meters may be of any type approved by the inspector provided that in operation their recordings are correct to within two and one half *per cent*.

Reading of
meters.

26. The Undertakers shall read each meter once each month for the purpose of rendering an account for energy consumed as recorded by each meter but may for their own purposes take such other readings as may appear to them necessary or desirable. For the purpose of reading meters the Undertakers shall have access thereto at any reasonable time.

Minimum
charge per
month for
energy pro-
vided
whether
used or not.

O. in C. 32
of 1952.

27. In addition to the provisions of the last preceding clause the Undertakers may require that where the value of energy consumed for the month as recorded by any meter is less than the sum of two dollars under the charges applicable a minimum charge of two dollars shall be payable to them. The provisions of this clause shall not however be applicable where the recording of the meter has been interrupted by any fault which may have developed therein or by any deliberate interference with its recording, or where current limiters are used in lieu of meters.

Interference
with record-
ing of meters.

28. Where there is evidence that the recording of any meter has been deliberately interfered with the Undertakers may take proceedings to recover the value of energy which they compute to be due to them and not recorded and otherwise to recover damages for such interference.

Inquiry by
Governor in
Council.

29. (1) The Undertakers shall send to the Governor in Council notice of any accident by explosion or fire and also of any other accident of such kind as to have caused or to be likely to have caused loss of life or personal injury which has occurred in any part of the Undertakers' works or their circuits or in connection with their works or circuits and also notice of any loss of life or personal injury occasioned by any such accident. The notice

shall be sent by the earliest practicable post after the accident occurs or as the case may be after the loss of life or personal injury becomes known to the Undertakers.

If the Undertakers fail to comply with the provisions of this sub-clause they shall be liable for each offence to a penalty not exceeding twenty-five dollars.

(2) The Governor in Council may, if he deems it necessary, appoint the inspector and any other person or both to inquire into and report as to the cause of any accident affecting the safety of the public which may have been occasioned by or in connection with the Undertakers' works or as to the manner and extent in and to which the provisions of this order and of the Ordinance and of any regulations under the Ordinance relating to the safety of the public have been complied with by the Undertakers, and any person appointed under this clause not being an inspector, shall for the purpose of his appointment, have all the powers of an inspector under this order and the expenses of such inquiry and report to such an amount as the Governor in Council may certify to be due shall be paid by the Undertakers and shall be a debt due from the Undertakers to the Crown and recoverable accordingly with costs.

Testing and Inspection.

30. (1) The inspector shall have the right to have access at all reasonable hours to the premises of the Undertakers for the purposes of making such inspections or tests of the electric lines, machinery and apparatus as he may deem necessary or expedient for any reasons whatsoever and in case the same are not in order he may require the Undertakers forthwith to have the same put in order. Where the Undertakers disagree with the requirements of the inspector in these matters they shall have the right of appeal to the Governor in Council.

Inspections
and tests by
inspector.

(2) The Undertakers may if they think fit on each inspection or test by the inspector be represented by some officer or other agent, but such officer or agent shall not interfere with the inspection or test.

31. (1) The Undertakers shall afford all facilities for the proper execution of this order with respect to inspection and testing and shall, subject to the right of appeal to the Governor in Council, comply with all the requirements of or under this order in that behalf.

Undertakers
to give facilities for the
making of
inspections
or tests.

(2) If the Undertakers make default in complying with any of the provisions of this clause they shall be liable in respect of each default to a penalty not exceeding twenty-five dollars and in case of a continuing offence to a further penalty of ten dollars for every day after the first day during which such offence continues.

Meters.

Undertakers
to supply
and install
meters.

32. (1) Where the quantity of energy supplied under this order is to be ascertained by means of a meter the Undertakers shall supply the consumer free of charge with a fit and appropriate meter and shall install the same upon the premises of the consumer and connect the service line therewith and for such purposes may authorise and empower any officer or person to enter upon such premises at all reasonable times and execute all necessary works and do all necessary acts.

Provided that such meter shall be of such construction and pattern and shall be installed and connected with the service lines in such manner as may be approved by the inspector and shall be supplied and maintained in correct working order entirely at the cost of the Undertakers and shall not, except by consent of the inspector, be placed elsewhere than at the consumer's terminals.

(2) A meter shall be considered to be in correct working order if the error in its readings does not exceed two and one half *per cent.*

Meter seals.

33. No person other than the inspector or a duly authorised officer or agent of the Undertakers shall connect, disconnect or break the seal of any meter belonging to the Undertakers, and if any person acts in contravention of this clause he shall be guilty of an offence and shall be liable on conviction thereof to a penalty not exceeding ten dollars.

Undertakers
may use
access to
meters.

34. The Undertakers shall at all reasonable times have access to and be at liberty to remove, test, inspect and replace any meter.

Undertakers
may use
meter or
other
apparatus to
get neces-
sary inform-
ation about
supply.

35. In addition to any meter which may be placed upon the premises of any consumer to ascertain the quantity of energy supplied the Undertakers may from time to time place upon their own lines or upon the premises of the consumer such meter or other apparatus as they may desire for the purpose of ascertaining or regulating either the amount of energy supplied

to such consumer or the number of hours during which such supply is given or is used or the maximum power taken by the consumer or any other quantity or time connected therewith:

Provided that such meter or apparatus shall be of such construction and pattern and shall be installed and connected with the service lines in such manner as may be approved by the inspector and shall be supplied and maintained entirely at the cost of the Undertakers and shall not, except by consent of the inspector, be placed elsewhere than between the main of the Undertakers and the consumer's terminals.

Maps.

36. (1) The Undertakers shall within twelve months after the initiation of service under this order cause a map to be made of the area of a horizontal scale of at least six inches to one mile and shall cause to be marked thereon the line of all their then existing mains and service lines, and shall once in every succeeding year cause such map to be duly corrected so as to show the then existing mains and service lines.

Map of area to be made and deposited.

(2) Every map so made or corrected for the Undertakers or a copy thereof with the dates expressed thereon of the last time when it was corrected shall be kept by the Undertakers at their office within the area of supply and a copy of every such map shall within one month after the same is made or corrected be served upon the Chief Secretary, the Postmaster General and the Local Authority.

(3) If the Undertakers fail to comply with any of the requirements of this clause they shall for every such offence be liable to a penalty not exceeding five dollars and to a further penalty not exceeding one dollar for every day after the first day during which such offence continues.

Notices, Etc.

37. Notices, orders and other documents under this order may be in writing or in print or partly in writing and partly in print and where any notice, order or document requires authentication by the Undertakers, the signature thereto by their secretary, attorney or manager shall be sufficient authentication.

Notices, etc. may be printed or written.

38. (1) Any notice, order or document required or authorised to be sent to or served upon any body or person under this order or under the Ordinance may be served by the same being addressed to such body or person and being left at or transmitted through the post to the following addresses respectively—

Service of notices, etc.

(a) in the case of the Governor in Council, the office of the Chief Secretary;

(b) in the case of the Postmaster General, the General Post Office;

(c) in the case of the Director of Public Works, the office of the Director of Public Works;

(d) in the case of any Local Authority, the office of such Local Authority;

(e) in the case of any company having a registered office, the registered office of such company;

(f) in the case of a company having an office or offices but no registered office, the principal office of such company; and

(g) in the case of any other person, the usual or last known place of abode of such person.

(2) Any notice, order or document by this order or by any Ordinance relating to the supply of electricity required or authorised to be served on the owner or occupier of any premises shall be deemed to be properly addressed if addressed by the description of the "owner" or the "occupier" of the premises (naming the premises) without further name or description.

(3) Any notice, order or document by this order or by any Ordinance relating to the supply of electricity required or authorised to be served on the owner or occupier of any premises may be served by delivering the same or a true copy thereof to some person on the premises, or if there is no person on the premises to whom the same can with reasonable diligence be delivered by fixing the notice on some conspicuous part of the premises.

(4) Subject to the provisions of this order as to cases of emergency where the interval of time between the service of any notice or document under the provisions of this order and the execution of any works or the performance of any duty or act is less than seven days, the following days shall not be reckoned in the computation of such time, that is to say, Sunday, Christmas Day, Good Friday and any public holiday under and within the meaning of the Public Holidays Ordinance or any other Ordinance.

Cap. 61.

Revocation of Order.

Revocation
of order
with con-
sent.

39. The Governor in Council may revoke this order at any time with the consent and concurrence of the Undertakers as to the whole or any part of the area upon such terms as the Governor in Council may direct, or in accordance with the provisions of section 7 (1) (f) of the Ordinance.

40. If the Governor in Council at any time revokes this order as to the whole or any part of the area the following provisions shall have effect—

Provisions
when order
revoked.

(1) The Governor in Council shall serve a notice of such revocation upon the Undertakers and upon the local authority and shall in such notice fix a date at which such revocation shall take effect and from and after such date all the powers and liabilities of the Undertakers under this order for the supply of energy within such area or part thereof as aforesaid shall cease and determine absolutely as the Governor in Council may direct.

(2) Within two months after the service of notices of such revocation by the Governor in Council upon the Undertakers and the Local Authority, the Local Authority if they think fit may by notice in writing require the Undertakers to sell and thereupon the Undertakers shall sell to them the Undertaking or such part of it as is within the district of the Local Authority upon terms of paying the then value of all land, buildings, works, materials and plant of the Undertakers suitable to and used by them for the purposes of the Undertaking or any part thereof as aforesaid, such value being agreed or estimated in manner directed by the Ordinance in the case of purchases effected by the Local Authority under section 27 of the Ordinance or any amendment thereof.

(3) Where any purchase is so effected the Undertaking or the part thereof so purchased shall vest in the Local Authority freed from any debts, mortgages or similar obligations of the Undertakers or attaching to the Undertaking and the revocation of this order as to the whole of the area or such part thereof as aforesaid shall extend only to the revocation of the rights, powers, authorities, duties and obligations to the Undertakers from whom the Undertaking or such part thereof as aforesaid is purchased in relation to the supply of energy within such area or part thereof and save as aforesaid this order shall remain in full force within such area or part thereof in favour of the Local Authority by whom such Undertaking or part thereof is purchased as aforesaid.

Temporary Suspension of Order.

41. If the Governor in Council at any time temporarily suspends the operation of this order as to any part of the area the Governor in Council shall serve a notice of such suspension upon the Undertakers and upon the Local Authority and shall in such notice fix a date at which such suspension shall take effect and thereafter and until such suspension ceases the

Provisions
in case of
temporary
suspension
of order.

Undertakers shall not be authorised to exercise any powers herein given as to such part of the area but the rights, privileges and franchises previously acquired by the Undertakers shall not be otherwise affected.

Provisions
in case of
default by
Undertakers.

42. (1) If in the judgment of the inspector the Undertakers make default in observance of any of the obligations imposed by this order or by the Ordinance and the Undertakers on their attention being called in writing by the inspector thereto shall not forthwith remedy the defect or omission to the satisfaction of the inspector, the inspector shall forthwith report the matter to the Director of Public Works and it shall be lawful for the inspector on the direction of the Governor in Council and after giving ten days notice in writing to the Undertakers, out of any moneys legally available for that purpose, himself to hire workmen and procure materials and to repair all defects and supply all omissions and it shall be lawful for the Attorney General to make application by summons to the Supreme Court on notice given to the Undertakers and upon the production of the inspector's certificate to the Supreme Court, judgment shall be entered for the amount so expended by the inspector and shall be enforced accordingly and unless such judgment is forthwith paid the Attorney General on behalf of the Government without prejudice to any other remedy shall be entitled to have a receiver appointed by the Supreme Court to receive all the tolls and earnings of the Undertakers and to pay and satisfy the said judgment and all costs of and incidental thereto.

The Undertakers shall afford every facility to the inspector for the purpose of enabling him to carry out the provisions of this clause. In any application for judgment or for the appointment of a receiver under this clause it shall be sufficient for the Attorney General to show that money was paid under the certificate of the inspector.

(2) Until any default on the part of the Undertakers shall have been remedied either by the Undertakers or by the inspector the Governor in Council may temporarily suspend the whole or any part of the Undertaking and when any amount expended by the inspector as aforesaid together with any costs incurred in recovering the same shall have been recovered as aforesaid such suspension shall thereupon cease.

(3) The Undertakers shall afford every proper facility to the inspector for the purpose of enabling him to carry out the provisions of this clause.

General Provisions.

43. If at any time it appears to the Governor in Council or the Local Authority—

Remedying of system and works.

(1) that the Undertakers are supplying power or energy by any system not specified in this order nor approved by the Governor in Council, or

(2) that, except in accordance with the provisions of this order, the Undertakers have permitted any part of their circuits to be connected with earth, or

(3) that any electric lines or works of the Undertakers are defective so as not to be in accordance with the provisions of this order, or of any Ordinance relating hereto, or of the regulations and conditions subject to which the Undertakers are for the time being authorised to supply energy under this order, or

(4) that the Undertakers' works or their supply are or is attended by danger to the public safety,

the Governor in Council may by order in writing require the Undertakers to remedy the same so as to comply with such order within such period as may be therein limited in that behalf, and if the Undertakers make default in complying with such order within the time so limited they shall be liable to a penalty not exceeding twenty dollars for every day during which such default continues:

Provided that where the matter so required to be remedied is in the opinion of the Governor in Council, dangerous to the public safety, he may by any such order as aforesaid forbid the use of such electric line or work as from such date as may be specified in that behalf until the order is complied with and if the Undertakers make use of any such electric line or work while the use thereof is forbidden they shall be liable to a penalty not exceeding five hundred dollars for every day during which such user continues.

44. (1) Where this order provides for any consent or approval of the Governor in Council the Governor in Council may give that consent or approval subject to terms or conditions, or may withhold such consent or approval as the Governor in Council may think fit.

Costs of application for consent or approval of the Governor in Council.

(2) All costs and expenses of or incident to any application for any approval, consent or order of the Governor in Council including any tests which may be required to be made by the Governor in Council for the purpose of determining whether the

same should be given or made to such an amount as may be certified to be due shall be borne and paid by the applicant or applicants therefor:

Provided always that where any approval is given by the Governor in Council to any plan, pattern or specification, the Governor in Council may require such copies of the same as the Governor in Council may think fit to be prepared and deposited at the Office of the Chief Secretary at the expense of the applicant or applicants, and may from time to time as the Governor in Council may think fit, revoke any approval so given or permit such approval to be continued subject to such modifications as the Governor in Council may think necessary.

Notice of approval, etc., of the Governor in Council to be given by advertisement.

45. Where the Governor in Council, on the application of the Undertakers, gives any approval or grants any extension of any time limited for the performance of any duties by the Undertakers or temporarily suspends the operation of or revokes this order as to the whole or any part of the area, notice that such approval has been given or such extension of time granted or such suspension or revocation made shall be published in the Gazette and in one other newspaper in the Colony.

Liability of consumer.

46. (1) Every consumer who wilfully or fraudulently, or by culpable negligence, injures or suffers to be injured any electric line, meter or other apparatus belonging to the Undertakers, or alters the index to any meter or prevents any meter from duly registering the quantity of energy supplied, or fraudulently abstracts, consumes or uses energy of the Undertakers shall (without prejudice to any other right or remedy for the protection of the Undertakers or the punishment of the offender) for every such offence be liable to a penalty not exceeding twenty-five dollars, and to a further penalty not exceeding five dollars for every day after the first day during which such offence continues and the Undertakers may, in addition thereto, recover from such consumer the amount of any damage by them sustained and in any case in which any consumer has wilfully or fraudulently injured or suffered to be injured any electric line, meter or fittings belonging to the Undertakers, or altered the index to any meter, or prevented any meter from duly registering the quantity of energy supplied, the Undertakers may also, until the matter complained of has been remedied but no longer, discontinue the supply of electricity to the consumer so offending (notwithstanding any agreement or contract previously existing) and the existence of artificial means for causing such alteration or prevention or for fraudulently abstracting, consuming or

using electricity of the Undertakers when such meter is under the custody or control of the consumer shall be *prima facie* evidence that such alteration, prevention, abstraction or consumption as the case may be, has been fraudulently, knowingly and wilfully caused by the consumer using such meter.

(2) Every consumer upon whose premises is found any device or artificial means so placed as to be capable of causing alteration of any meter or preventing any meter from duly registering the quantity of energy supplied or by means of which energy might be fraudulently abstracted, consumed or diverted, shall be liable to a penalty not exceeding twenty-five dollars and to a further penalty not exceeding five dollars for every day after the first day during which the said offence continues and the Undertakers may, in addition thereto, recover from such consumer the amount of any damage by them sustained.

(3) Any person whose supply of electricity may have been cut off for neglect to pay any charge for electricity or any other sum due from him or her to the Undertakers in respect of the supply of electricity to such person and who shall procure any other person to apply for a supply of electricity in the name of such other person, but for the benefit of that person whose supply of electricity has been cut off shall be guilty of an offence and shall on conviction thereof be liable to a penalty not exceeding fifty dollars.

47. All penalties under this order or under any regulations made under this order or under the Ordinance, the recovery of which is not otherwise specially provided for, may be recovered under the Summary Jurisdiction Ordinances for the time being in force.

Procedure
and appeal.

48. Nothing in this order shall affect any right or remedy of the Postmaster General under the Ordinance or under any Ordinance for the time being in force relating to the Government telecommunications, and all provisions contained in this order in favour of the Postmaster General shall be construed to be in addition to and not in modification of the provisions of those Ordinances.

Saving of
rights of
Postmaster
General.

49. Subject to the Ordinance or this order, nothing in this order shall exonerate the Undertakers from any indictment, action or other proceeding for nuisance in the event of any nuisance being caused by them.

Nuisances.

Rivers.

50. Nothing in this order shall authorise the Undertakers to place any electric works or lines on, over, under or across any navigable river except in such manner as may have been approved by the Governor in Council.

Right of
appeal to
Governor in
Council.

51. Where not otherwise provided by this order or by the Ordinance, the Undertakers shall have a right of appeal to the Governor in Council.

Private
generation
of electricity.

52. Nothing in this order shall prohibit or prevent any person or body from generating and using electricity for his or their own business or other purposes and on his or their own premises, provided the person or body does not in any manner convey, distribute or supply electricity beyond the boundaries of the premises whereon the generating plant is situate or distribute, supply or sell electricity to any other person.

Regulations
under the
order.

53. (1) The Governor and Legislative Council may, from time to time, make any regulations they think expedient for securing the safety of the public from personal injury, or from fire or otherwise, and from time to time amend or repeal any such regulations.

(2) Any regulations so made or amended by the Governor and Legislative Council shall, from and after the date thereof, have the like effect in every respect as though they had been originally inserted in the licence, order, or special Ordinance authorising the undertaking; and

(3) Every regulation so repealed shall, from and after the date thereof, be repealed accordingly, but the repeal shall not affect any liability or penalty incurred in respect thereof prior to the date of the repeal, or any proceeding or remedy which might have been had in relation thereto.

Installation
of tele-
phones.

54. Nothing herein contained shall prevent the Undertakers from installing telephones or other communication systems for their own use; also subject to the approval of the Governor in Council, the Undertakers may install telephones for general use in the area.

Application
of regula-
tions.

55. The provisions of the Electric Installation Regulations and any amendments thereto, except where inconsistent with the provisions of this order, shall be applicable to this order.

Publication
of Electric
Installation
regulations.

56. All regulations and conditions made under the Ordinance or under any law affecting the Undertaking and for the time being in force shall within the month after the same as made or last altered have come into force be printed at the expense

of the Undertakers and true copies thereof certified by or on behalf of the Undertakers shall be kept by them at their registered office within the area and supplied to any person demanding the same at a price not exceeding twelve cents for each copy.

SCHEDULE.

AREA.

The village of Bartica situated at the confluence of the Essequibo and Mazaruni Rivers in the County of Essequibo and Colony of British Guiana as delineated on a plan dated 19th August, 1887, by William Chalmers, Assistant Crown Surveyor, deposited in the Deeds Registry on the 26th January, 1889, and any future extension or extensions of the Village and the environs of the said Village within a distance of twenty-five miles of the limits of the said Village.
