Electricity (Safety, Quality and Continuity) Regulation
PART I : SECTION (I) — GENERAL

Government Notifications

REGULATIONS MADE UNDER SECTION 54 OF THE SRI LANKA ELECTRICITY ACT, No. 20 OF 2009

BY virtue of the powers vested in me by Section 54 of the Sri Lanka Electricity Act, No. 20 of 2009, and on the recommendation of the Public Utilities Commission of Sri Lanka, I, Ranjith Siyambalapitiya, the Minister of Power and Renewable Energy, do by this order make the undermentioned Regulations on Electricity (Safety, Quality and Continuity) Standards.

RANJITH SIYAMBAIPITIYA,
Minister of Power and Renewable Energy.

13th July 2016.


Sri Lanka Electricity Act, No. 20 of 2009

REGULATIONS made by the Minister of Power and Renewable Energy on the recommendation of the Public Utilities Commission of Sri Lanka, under section 54 of the Sri Lanka Electricity Act, No. 20 of 2009 read with section 56 of the aforesaid Act.

Regulations

1. These regulations may be cited as the Electricity (Safety, Quality and Continuity) Regulations No. of 2016.
2. In these regulations –

(a) any requirement for goods or materials to comply with a specified standard shall be satisfied by compliance with an equivalent standard or Code of Practice of the Sri Lanka Standard Institute (SLSI) or International Electronical Commission (IEC), in so far as the standard or code of practice in question enables electricity safety, quality or continuity considerations to be met in an equivalent manner.

(b) a reference to a Relevant Persons network, their Overhead Line, their substation or their equipment is a reference to a network, an Overhead Line, a substation or equipment owned or operated by them.

3. These regulations shall apply to Relevant Persons and to any of their agents, contractors or sub-contractors:

Provided however, regulations 10, 26, 27, 47, 50, 59, 64 and 67 shall not apply to any agent, contractor or sub-contractor.

4. In the generation, transmission, distribution, supply and use of electricity all relevant persons shall take all reasonable steps to -

(a) protect the public from dangers arising from the generation, transmission, distribution, supply and use of electricity from any electric line or electrical plant,

(b) eliminate or reduce the risks of personal injury or damage to property or interference with its use resulting from the transmission, distribution and supply of electricity, and

(c) comply with all supply and safety standards, contained in the Distribution Code, the Grid Code and Associated Technical and Safety Standards, as applicable to relevant persons.

5. Relevant persons shall in supplying electricity and providing electricity supply services, ensure that their Equipments are -

(a) sufficient for the purposes and the circumstances for which it is used; and

(b) constructed, installed, protected, used and maintained as to prevent danger, interference with or interruption of supply, so far as is reasonably practicable.

6. Relevant persons shall -

(a) for each of their overhead lines or part thereof and for each of their substations, assess the foreseeable risk of danger from interference, vandalism or unauthorized access, having regard to both the nature of the equipment and use of the surrounding land and classify the degree of the risk;

(b) enter details of the result of the classification of risk in a register or other permanent record kept updated for the purpose; and

(c) take measures to safeguard the equipment commensurate with the nature and class of risk to which it gives rise.

7. Relevant persons shall take reasonable steps to ensure that the public are made aware of the dangers which may arise from activities carried out in proximity to overhead lines and to indicate the means by which those dangers may be avoided.
8. Relevant persons shall take all precautions to prevent, so far as is reasonably practicable, dangers due to the influx of water or any noxious or explosive liquid or gas into any enclosed space, arising from the installation or operation of their equipment.

9. The quality of all materials used for buildings and other structures and for the construction of all equipment, apparatus and the electric lines shall, except where otherwise specified in these regulations be in accordance with the standards prescribed in the appropriate specification of the Sri Lanka Standards Institute (SLSI) or of the International Electronical Commission (IEC).

10. Relevant Persons shall disclose such information and act in co-operation with each other as may reasonably be required in order to ensure effective compliance in the implementation of these regulations.

11. Relevant Persons shall so far as it is reasonably practicable, inspect their network with sufficient frequency, so that they are aware of what action they need to take to ensure compliance with these regulations and in the case of their substations and overhead lines maintain a record of such inspections for a period of not less than ten (10) years including any recommendations incidental thereto.

12. Relevant Persons shall apply such protective devices to their Networks as far as is reasonably practicable to prevent any current, including any leakage to earth from flowing in any part of their network for such a period that such part of their network can no longer carry that current without danger.

13. Relevant Persons shall -

(a) in the design, construction, maintenance or operation of his network, take all reasonable precautions to ensure continuity of the Supply Neutral Conductor; and

(b) not introduce or retain any protective device in any Supply Neutral Conductor or any earthing connection of a low voltage network which he owns or operates.

14. Relevant persons shall, ensure that their network do not become disconnected from earth in the event of any foreseeable current which may occur due to a fault.

15. Relevant persons shall, in respect of any high voltage or medium voltage network which such persons own or operate, ensure that -

(a) the network is connected with earth at or as near as is reasonably practicable to the source of voltage but where there is more than one source of voltage in that network, the connection with earth need only be made at one such point;

(b) the earth electrodes are designed, installed and used in accordance with the stipulations of the Grid Code, the Distribution Code or Associated Technical and Safety Standards, as applicable to each of the relevant persons, so as to prevent danger occurring in any low voltage network as a result of any fault in the high voltage network; and

(c) where the network is connected with earth through a continuously rated arc suppression coil, an automatic warning is given to the relevant persons, of any fault which causes the arc suppression coil to operate.

16. Relevant persons shall, in respect of any low voltage network which they own or operate, ensure that -

(a) the outer conductor of any electric line which has concentric conductors is connected with earth;

17. A consumer shall not combine the neutral and protective functions in a single conductor in his Consumer’s Installation.

18. Regulations 14, 15 and 16 shall not apply to electric lines and electric plants which are situated within a generation station if adequate alternative arrangements are in place to prevent danger.

19. (1) Relevant Persons without prejudice to any other requirement as to earthing shall ensure that any metalwork enclosing, supporting or otherwise associated with their equipment in a network and which is not intended to serve as a phase conductor, where necessary is connected with Earth in order to prevent any danger.

(b) every supply neutral conductor is connected with earth at or as near as is reasonably practicable, to the source of voltage except that where there is only one point in a network at which consumer’s installations are connected to a single source of voltage that connection may be made at that point or at another point nearer to the source of voltage; and

(c) no impedance is inserted in any connection with earth of a low voltage network other than that required for the operation of switching devices or of instruments or equipment for control, telemetry or metering.

20. Relevant persons shall, in respect of every substation which they own or operate-

(a) (i) enclose such substation where necessary, to prevent danger or unauthorized access;

(ii) enclose any part of such substation, which is open to the air and contains live equipment which is not encased, with a fence or wall not less than two point four (2.4) meters in height to prevent, danger or unauthorized access, in accordance with the provisions of the Grid Code, the Distribution Code and Associated Technical and Safety Standards as applicable to each of the Relevant persons;

(b) ensure that there are at all times displayed, -

(i) sufficient safety signs which are of such size and are placed in such positions as shown in Schedule I hereto and are necessary to give due warning of such danger as is reasonably foreseeable in the circumstances;

(ii) a notice in a conspicuous position, which gives the location or identification of the substation, the name of each relevant person who owns or operates the substation, equipments making up the substation and the telephone number where a suitably qualified person appointed for this purpose by such relevant person to be in constant attendance; and

(iii) such other signs, which are of such size and placed in such positions, as are necessary to give due warning of danger having regard to the siting of the nature of and the measures taken to ensure the physical security of the substation equipment; and
(c) take all reasonable precautions to minimize the risk of fire associated with the equipment.

21. Relevant persons shall not use any of their underground cables and associated equipment (except those in Generating Plants or Substations) which do not comply with regulations 22 and 23.

22. Underground cables and associated equipment which contain conductors not connected with earth shall -

(a) in respect of joints or terminations of a conductor in a low voltage system, have some form of mechanical protection; and

(b) in respect of any other part of any conductor, have an electrically continuous metallic screen connected with earth,

so placed as to ensure that, any tool or device likely to be used in the vicinity will make contact with such protection or screen before it can make contact with any conductors not connected with earth.

23. Every underground cable shall be kept at such depth or be otherwise protected so as to avoid any damage or danger by reason of such uses of the land which can be reasonably expected under a given situation.

24. Underground cables containing conductors not connected with earth shall be protected, marked or otherwise indicated so as to ensure, that any person excavating the land above the cable will be given sufficient warning of its presence.

25. The protection, marking or indication required by regulation 24 shall be made in accordance with the provisions of the Grid Code, Distribution Code and Associated Technical and Safety Standards, as applicable to each of the relevant persons as will be likely to provide an appropriate warning. In the absence of such provisions, the protection, marking or indication shall be made by placing the cable in a pipe or duct or by overlaying the cable at a suitable distance with protective tiles or warning tape or by the provision of such other protective or warning device, mark or indication, or by a suitable combination of such measures.

26. Relevant persons shall take all reasonable steps in respect of any network or part thereof, owned or operated by relevant persons which is below ground on land which is not under their control, to maintain and keep up to date maps and records in hard and electronic form indicating the location and depth below surface level at which all cables are laid that form part of the network or parts thereof for which such relevant persons are responsible:

Provided however, nothing in this regulation shall require the inclusion on a map the information relating to the position and depth below surface level of networks or parts thereof which were placed below ground before the date of issuance of the license or exemption under this Act, as applicable, to each of the relevant person, where it would not be reasonably practicable to obtain such information.

27. Relevant persons shall make a copy of the whole or the relevant part of any map prepared or kept for the purposes of regulation 26 available for inspection by -

(a) the Public Utilities Commission of Sri Lanka or any person authorized by the Public Utilities Commission of Sri Lanka; or

(b) any other person who can show reasonable cause for requiring to inspect any part of the map,

and shall, on request, provide to them a copy of such map or part of the map.

28. Relevant persons may, provide to any person, on payment of a reasonable fee, a copy of a map or part thereof made under regulation 27.
29. Relevant persons shall ensure that overhead lines other than those in generating plants and substations comply with these regulations and all other design standards specified in the Grid Code, the Distribution Code and such Associated Safety and Technical Standards, as applicable to each of the relevant persons and shall not use any of their overhead lines which according to their knowledge do not comply with the same.

30. At any point where an overhead line is over or along a road or over any other location accessible or inaccessible to vehicular traffic, the height above the ground of such overhead line at the maximum likely temperature of that line, should not be less than the limits specified in relevant columns of Part I of Schedule 2.

31. Regulation 30 shall not apply to any section of -

(a) an overhead line at any point where it is not over or along a road accessible to vehicular traffic and which -

(i) is surrounded by insulation; or

(ii) is not surrounded by insulation but is at least four point three (4.3) meters above the ground and connects equipment mounted on a support to any overhead line; or

(iii) is connected with earth; or

(b) an overhead service line, erected between a building or structure and the nearest support or between two buildings or structures at any point where it is not over or along a road accessible to vehicular traffic, provided that-

(i) it is surrounded by insulation; and

(ii) height above the ground is not less than three point seven (3.7) meters, where that line is over any way used by vehicles and to which, the members of the public have access, or three point five (3.5) meters where that line is over any way used by vehicles and to which, a member of the public does not have access, or two point seven (2.7) meters in any other section of that line; or

(c) an overhead line which is a part of the consumers’ installation, erected between a building or structure and the nearest support or between two buildings or structures at any point where it is not over or along a road accessible to vehicular traffic, provided that -

(i) it is surrounded by insulation; and

(ii) height above the ground is not less than three point seven (3.7) meters, where that line is over any way used by vehicles, or two point seven (2.7) meters, in any other section of that line.

32. The height above the ground of any wire or cable which is attached to a support carrying any overhead line shall not be less than five point five (5.5) meters at any point where it is over a road accessible to vehicular traffic.

33. Where an overhead line crosses a navigable water way, such heights should be maintained so as to prevent any danger.

34. Any part of an overhead line which is not connected with earth and which is not ordinarily accessible shall be supported by insulators or surrounded by insulation.

35. Any part of an overhead line which is not connected with earth and which is ordinarily accessible shall be -
(a) made dead; or

(b) so insulated that it is protected, so far as is reasonably practicable, against mechanical damage or interference; and

(c) adequately protected to prevent danger.

36. Any person responsible for erecting a building or structure which will cause any part of an overhead line which is not connected with earth to become ordinarily accessible shall give notice of his intention to erect that building or structure in writing to the relevant person who owns or operates the overhead line, and obtain a safety clearance certificate from the relevant person before erecting such building or structure. However, a safety clearance certificate shall not be issued and the building or structure shall not be erected if the distance from such building or structure to any part of the overhead line, at the maximum likely temperature of that line, becomes less than the limits specified in Part II of Schedule 2 hereto.

37. Where an overhead line is constructed over or near any building or structure, the distance from such building or structure to any part of the overhead line, at the maximum likely temperature of that line, shall not become less than the limits specified in Part II of Schedule 2 hereto.

38. Any bare conductor not connected with earth, which is part of a low voltage overhead line, shall be situated throughout its length directly above a bare conductor which is connected with earth.

39. The distance from any tree to any overhead line, at the maximum likely temperature of that line, shall not be less than the limits specified in Part III of Schedule 2. Partially insulated overhead lines shall be considered as “not surrounded by insulation” for purposes of this regulation.

40. No overhead line shall so far as is reasonably practicable, come so close to any building, tree or structure as to cause danger.

41. Every support carrying a high voltage overhead line shall, if the circumstances reasonably require, be fitted with devices to prevent, so far as is reasonably practicable, any unauthorized person from reaching a position at which any such line would be a source of danger.

42. Every support carrying a high voltage overhead line, shall have attached to it sufficient safety signs of such size and be placed in such positions as are necessary to give due warning of such danger as is reasonably foreseeable in the circumstances. Every sign attached or replaced after the enforcement of these regulations shall comply with specifications setout in Schedule 1 hereto.

43. Where lightning conductors are used or other bare conductors are used which have run down supports, they shall be protected so as to prevent danger within three (3) meters from the ground.

44. Every stay wire which forms part of or is attached to any support carrying an overhead line incorporating bare conductors, shall be fitted with an insulator of which no part shall be less than three (3) meters above ground level.

45. Where a person operates a source of energy as a switched alternative to transmission licensee’s or distribution licensee’s network, he shall ensure that, that source of energy cannot operate in parallel with that network and where the source of energy is part of a low voltage consumer’s installation, it shall comply with Sri Lanka standard requirements:

Provided however, no person shall install or operate a source of energy which may be connected in parallel with a transmission licensee’s or distribution Licensee’s network unless he-
(a) has the necessary and appropriate equipment in accordance with Grid Code, the Distribution Code and such Associated Safety and Technical Standards, as applicable to each of the relevant persons, to prevent danger or interference with that network or with the supply to consumers;

(b) has the necessary and appropriate personnel and procedures to prevent danger;

(c) where the source of energy is part of a low voltage consumer’s installation, complies with Sri Lanka standard requirements; and

(d) obtain written approval from the transmission licensee or distribution licensee who owns or operates the network:

Provided further that paragraphs (b) and (d) shall not apply to a person who installs or operates a source of energy which may be connected in parallel with a transmission licensee’s or distribution licensee’s network where-

(i) paragraphs (a) and (c) are complied with;

(ii) the source of energy is configured to disconnect itself electrically from the parallel connection when the transmission licensee’s or distribution licensee’s equipment disconnects the supply of electricity to the person’s installation; and

(iii) the person installing the source of energy ensures that the transmission licensee’s or distribution licensee’s written permission is obtained, to use a source of energy in parallel with the network before, or at the time of, commissioning the source.

46. The transmission licensees and distribution licensees shall ensure that their network shall be so arranged and so provided, where necessary, with fuses or automatic switching devices, appropriately located and set in order to minimize the number of consumers affected by any fault in their respective networks and at all times take all reasonably practicable steps to avoid interruptions of supply resulting from his own acts.

47. No person shall make or alter a connection from the Transmission Licensee’s or Distribution Licensee’s network to a consumer’s installation, a street electrical fixture or to another distribution licensee’s network without the consent of the transmission licensee or the distribution licensee.

48. The transmission licensee or the distribution licensee shall not unreasonably withhold the consent to make or alter the connection referred to in regulation 47 unless there exist reasonable grounds to believe that -

(a) the consumer’s installation, street electrical fixture or the distribution licensee’s or transmission licensee’s network has failed to comply with Sri Lanka standard requirements or provisions of any of these regulations; or

(b) the connection itself will not be so constructed, installed, protected and used or arranged for use, so as to prevent as far as is reasonably practicable, danger or interruption of supply; or

(c) the connection will not comply with Grid Code, the Distribution Code and Associated Safety and Technical Standards, as applicable to each of the relevant persons.

49. Any dispute between a person and the transmission licensee or the distribution licensee, arising from delay in giving or refusal to give the consent under regulation 48 and which cannot be resolved between them may be referred by either party to the Commission in terms of Electricity (Dispute Resolution Procedure) Rules.
50. Where, commencing to provide a supply of electricity to any consumer or in making changes to the existing supply as requested by a consumer, transmission and distribution licensees shall, by notification in writing, declare to the consumer-

(a) the type of current, whether direct or alternating, which he proposes to supply;

(b) in the case of alternating current, the number of phases and also the frequency at which he proposes to deliver the energy to the delivery points; and

(c) the voltage at which he proposes to deliver the energy to the supply terminals:

provided however, unless otherwise agreed in writing between the transmission licensee or distribution licensee, and the consumer or any other distribution licensee likely to be affected, the frequency declared shall be fifty (50) Hertz and the voltage declared in respect of a low voltage supply shall be two hundred and thirty (230) Volts between the phase and neutral conductors at the supply terminals.

For the purpose of this regulation, unless otherwise agreed in writing by the persons referred to therein, the permitted variations means:-

(a) a variation not exceeding one (1) per centum above or below the declared frequency;

(b) in the case of a low voltage supply, a variation not exceeding six (6) per centum above or below the declared voltage at the declared frequency;

(c) in the case of a medium voltage supply, a variation not exceeding six (6) per centum above or below the declared voltage at the declared frequency; and

(d) in the case of a high voltage supply, a variation not exceeding ten (10) per centum above or below the declared voltage at the declared frequency.

51. The Commission may, following an application by any transmission licensee or distribution licensee affected by a declaration made under regulation 50, authorize the variation of any of the values or permitted variations contained in a declaration provided that the applicant has previously given notice of his application to such persons and in such terms as the Commission may require.

52. Where the Commission has authorized a variation under regulation 51, the transmission licensee or distribution licensee shall forthwith serve notice of any such variation on every supplier, other distribution licensee and consumer to whom it may apply.

53. Transmission licensee and distribution licensee shall ensure that, except in exceptional circumstances, the characteristics of the supplies to consumer’s installations connected to his network comply with the declarations made under regulation 50.

54. The number and rotation of phases in any supply shall not be varied by the transmission licensee or distribution licensee except with the written agreement of the consumer or in the absence of such written agreement, the written consent of the Commission who may impose such conditions, if any, as the Commission thinks appropriate.

55. The transmission licensee and the distribution licensee shall ensure that each item of their equipment which is on a consumer or a generation licensee’s premises but not under the control of the consumer or generation license (whether forming part of the consumer’s or generation licensee’s installation or not) is-
(a) suitable for its purpose;

(b) installed and, so far as is reasonably practicable, maintained so as to prevent danger; and

(c) protected by a suitable fusible cut-out or circuit breaker which is situated as close as is reasonably practical to the supply terminals.

56. Every circuit breaker or cut-out fuse forming part of the fusible cut-out mentioned in regulation 55 (c), shall be enclosed in a locked or sealed container as appropriate.

57. Where the circuit breaker or the cut-out fuse form part of the equipment which is on a consumer’s premises but is not under the control of the consumer, a transmission licensee or a distribution licensee shall mark it permanently, so as to identify clearly the polarity of each of them and the separate conductors of low voltage electric lines which are connected to supply terminals and such markings shall be made at a point which is as close as is practicable to the supply terminals in question.

58. Unless the transmission licensee and distribution licensee can reasonably conclude that it is inappropriate for reasons of safety, any such licensee shall, when providing a new connection at low voltage, -

(a) make available the neutral conductor of his network for connection to the neutral conductor of the consumer’s installation;

(b) if distribution licensee’s protective conductor is available, make available the protective conductor of his network for connection to the protective conductor of the consumer’s installation.

59. Where a connection to a transmission licensee’s or distribution licensee’s network has been made, or is proposed, and the transmission licensee or distribution licensee is not satisfied that the consumer’s installation or the distribution licensee’s network or street electrical fixture which is or would be connected to their network is or would be so constructed, installed, protected and used or arranged for use so as to prevent, so far as is reasonably practicable, danger or interference with their or any other distribution licensee’s network or with the supply to any consumer’s installation or street electrical fixture, the transmission licensee or the distribution licensee may issue a notice in writing to the consumer or other distribution licensee or the owner of the street electrical fixture requiring remedial work to be carried out within such reasonable period as may be specified in the notice.

60. If the remedial works specified in the notice by the transmission licensee or the distribution licensee are not carried out on or before the end of the period specified in the notice, the transmission licensee or the distribution licensee may disconnect or refuse to connect the supply to the consumer’s installation or the distribution licensee’s network or street electrical fixture, and in such an event the transmission licensee or the distribution licensee shall by further notice in writing addressed to the consumer or other distribution licensee or the owner of the street electrical fixture, set out the reasons for the disconnection or the refusal to connect.

61. A transmission licensee or a distribution licensee may disconnect the supply to the consumer’s installation or the distribution licensee’s network or street electrical fixture without giving notice as required by regulation 59 if such disconnection can be justified on grounds of safety, but in such an event the transmission licensee or the distribution licensee shall by notice in writing addressed to the consumer or the distribution licensee or the owner of the street electrical fixture and served as soon as reasonably practicable after the disconnection, give the reasons for such disconnection and if applicable details of any remedial measures required to be taken by the consumer or the distribution licensee or the owner of the street electrical fixture.

62. The transmission licensee or the distribution licensee shall connect or restore the supply when the stipulated remedial measures have been taken by the consumer or the distribution licensee or the owner of the street electrical fixture to the reasonable satisfaction of the transmission licensee or the distribution licensee or if no remedial measures are required, as soon as is reasonably practicable after the grounds for disconnection have ceased to apply.
63. Any dispute between the transmission licensee or the distribution licensee and the consumer or the distribution licensee or the owner of the street electrical fixture, over the disconnection of or refusal to connect the consumer’s installation or the distribution licensee’s network or street electrical fixture which cannot be resolved between them, may be referred by any of the party to the Commission in terms of Electricity (Dispute Resolution Procedure) Rules.

64. A transmission licensee or a distribution licensee shall provide, in respect of any existing or proposed consumer’s installation which is connected or is to be connected to his network, to any person who can show any reasonable cause for requiring the information, a written statement of -

(a) the maximum prospective short circuit current at the supply terminals;

(b) for low voltage connections, the maximum earth loop impedance of the earth fault path outside the installation;

(c) the type and rating of the transmission licensee’s or the distribution licensee’s protective device or devices, nearest to the supply terminals;

(d) the type of earthing system applicable to the connection; and

(e) the information specified in regulation 50, which applies or will apply to that installation.

65. A transmission licensee or a distribution licensee may discontinue a supply for the purposes of testing or for any other purpose connected with the carrying on of his activities; only -

(a) for such period as may be necessary but no longer; and

(b) if not less than 2 days notice has been received by the relevant persons;

Provided however, a transmission licensee or a distribution licensee may discontinue a supply even if the notice required by regulation 65(b) above has not been received by the relevant persons if -

(i) the discontinuation is agreed between the relevant consumer and the transmission licensee or the distribution licensee; or

(ii) the transmission licensee or the distribution licensee considers it necessary to discontinue supplies to the relevant consumer in order to prevent danger or to undertake essential emergency repairs; or

(iii) if there is an urgent need to discontinue the supply relating to the safe or proper operation of the network; or

(iv) the notice is not received by the relevant consumer due to circumstances not within the control of the transmission licensee or the distribution licensee.

66. A relevant person whose equipment is subject to inspection, test or examination for the purpose of ascertaining whether a breach of these regulations may have occurred, by an inspector appointed under section 6 of the Sri Lanka Electricity Act, No. 20 of 2009, shall afford reasonable facilities and provide such information to the inspector as he may require for the purposes of performing his functions under this regulation successfully.

67. (1) Notice shall be given to the Commission in accordance with this regulation by the transmission licensee or the distribution licensee in respect of any event specified in paragraph (2)(b) where the event involves a consumer’s installation which is connected to the transmission licensee’s or distribution licensee’s network and by any of the relevant
persons in respect of any other event specified in paragraph (2) and involves a network or equipment which is in the
ownership of, under the control of, or used by, the relevant person, as the case may be.

(2) The events referred to in paragraph (1) are -

(a) any event attributable in whole or in part to the generating, transforming, control or carrying of energy up
to and including the supply terminals, which has given rise to -

(i) the death of any person; or

(ii) an injury (including any electric shock) to any person; or

(iii) any fire; or

(iv) any explosion or implosion;

(b) any event attributable in whole or in part to the presence of electricity on the consumer’s side of the
supply terminals on any non-industrial and non-commercial premises resulting in the death of any person,
if the event becomes known to the distribution licensee;

(c) any event, whether or not accompanied by an event specified in sub-paragraph (a), which caused an overhead
to be at a height/distance less than that required by regulations 30, 36, 37 and 39;

(d) the occurrence of any damage to any underground cable resulting from an event not specified in sub-
paragraphs (a) and (b); and

(e) any event other than those listed in sub-paragraph (a), (c) or (d) which, taking into account the circumstances
of that event, was likely to cause any of the events listed in sub-paragraph (a).

(3) In respect of any event specified in paragraph (2)(a) -

(a) the requirement to give notice in accordance with paragraph (4) (so far as applicable) applies in addition
to the requirement to give notice in accordance with paragraph (5) unless the notice given satisfies the
requirements of both paragraphs; and

(b) the requirement to give notice in accordance with paragraphs (4) and (5) applies in addition to the
requirement to give notice in accordance with paragraph (6).

(4) In respect of any event specified in paragraph (2)(a)(i) or (in the case of a serious injury) in paragraph
(2)(a)(ii), notice of the event shall be given to the Commission by telephone or other immediate means of communication
immediately after the event becomes known to the relevant person, as the case may be.

(5) In respect of any event specified in paragraph (2)(a) or (2)(b), notice containing the relevant particulars
shall, subject to paragraph (8), as soon as possible after the event becomes known to the relevant person, as the case may
be, be given to the Commission in writing by the quickest practicable means.

(6) In respect of any event notifiable under paragraph (2)(a), (2)(c) or (2)(e), notice shall be given to the
Commission as soon as the event becomes known to the relevant person, which,

(a) conforms to the description specified by the Commission; and

(b) subject to paragraph (8), contains the information comprising the relevant particulars, arranged in a form
which complies with the technical requirements specified by the Commission.
(7) In respect of any event specified in paragraph (2)(d), notice containing the relevant particulars shall be sent to the Commission by means of a return in writing to be submitted within one month of the end of the period of 3 months ending on 31st March, 30th June, 30th September or 31st December (as the case may be) in which the event became known to the relevant person as the case may be.

(8) The notices required by paragraphs (5) and (6) shall, where the giver of the notice is unable to provide full particulars, contain such of the relevant particulars as are available to the giver of the notice at the time of giving it, and the remaining particulars shall be supplied to the Commission in writing by the quickest practicable means immediately after they have become known.

(9) The Commission may require a relevant person to submit further information to the Commission relating to any matter which the relevant person has notified the Commission under this regulation.

(10) In this regulation -

(a) “event” means any event of the kind specified therein irrespective of whether it is accidental or otherwise;

(b) “relevant particulars” means -

(i) in respect of an event specified in paragraphs (2)(a), (2)(b) or (2)(d) of the regulation, the particulars specified in Parts I, II or IV respectively of Schedule 3; and

(ii) in respect of an event specified in paragraphs (2)(c) or (2)(e) of the regulation, the particulars specified in Part III of Schedule 3;

(c) “serious injury” means any injury which results in the person injured being admitted into hospital as an in-patient.

68. The Commission may from time to time, on its own motion or pursuant to a request made by a relevant person, by Order published in the Gazette, exempt the person requesting the exemption or certain categories of persons from the requirement to comply with these regulations or any part thereof for such period as may be set out in the said Order, having regard to the manner in which or the quantity of electricity likely to be generated or distributed by such categories of persons. The request shall be made in writing and shall disclose the reasons for the exemption sought.

69. (1) Where the Commission is satisfied that -

(a) any network or any part thereof, or any equipment which is constructed, placed, erected, maintained, or used otherwise than in accordance with these regulations; or

(b) any part of a consumer’s installation which is not enclosed in a building; or

(c) any network or any part thereof, any part of a consumer’s installation which is not enclosed in a building or any equipment which is in breach of any relevant exemption or other relevant provision made under these regulations in force at the time when the notice is served, is liable to become -

(i) a source of danger to others; or

(ii) an interference with the supply to others; or

(iii) a cause of interruption to the supply to others,
then and in such an event the Commission may serve notice on the relevant person or consumer specifying the matter of which the Commission is satisfied and require that the network, consumer’s installation or the equipment or the part thereof specified in the notice -

(a) shall not be used; or

(b) be made dead; or

(c) be removed; or

(d) only be used subject to compliance with such conditions, improvements or modifications as that notice shall specify,

within the time specified in that notice and the person on whom that notice is served shall comply with the provisions of that notice.

(2) Where such a notice as referred to in paragraph (1) above has required that any network, consumer’s installation, equipment or the part thereof specified in the notice shall not be used or shall be made dead or shall be removed or only used subject to compliance with conditions, improvements or modifications, that notice shall remain in effect until such time as the network, consumer’s installation, equipment or the part thereof specified in the notice shall comply with these regulations or until the Commission shall withdraw the notice:

Provided however, a relevant person or consumer may appeal to the Commission within two (2) days for full or partial release of himself from the requirements of the notice, stating the full extent of the reasons for such appeal.

(3) Approval will be granted by the Commission for such appeals as specified in (2) above, where the Commission is satisfied with the reasons mentioned in the appeal;

(4) A copy of this regulation shall be endorsed upon or accompany every notice served by the Commission pursuant to this regulation.

70. Relevant persons shall,

(a) prepare a safety manual incorporating all safety rules and safety precautions applicable to their network; and

(b) establish a safety management system at all locations where an electrical interface exists between the relevant person’s network and those of its users and other relevant persons,

in accordance with the Grid Code, Distribution Code and other relevant standards, as applicable to each of the relevant persons.

71. In these regulations, unless the context otherwise requires:

“Act” means the Sri Lanka Electricity Act, No. 20 of 2009;

“Commission” means the Public Utilities Commission of Sri Lanka established under the Public Utilities Commission of Sri Lanka Act, No. 35 of 2002;

“conductor” means an electrical conductor arranged to be electrically connected to a network but does not include conductors used or intended to be used solely for the purpose of control, protection or regulation of supply or for communication;
“connected with earth” means connected with earth in such manner as will at all times provide a rapid and safe discharge of energy and cognate expressions shall be construed accordingly;

“consumer” means a consumer of electricity in Sri Lanka and includes a prospective consumer.

“consumer’s installation” means the electric line situated upon the consumer’s side of the supply terminals together with any equipment permanently connected or intended to be permanently connected thereto on that side;

“danger” includes danger to health or danger to life or limb from electric shock, burn, injury or mechanical movement to persons, livestock or domestic animals or from fire or explosion, attendant upon the generation, transmission, transformation, distribution or use of energy;

“distribution Main” means a low voltage electric line which connects a distributor’s source of voltage to one or more service lines or directly to a single consumer’s installation;

“distribution code” shall mean such technical or operational codes approved by the Commission and required by a distribution licensee to be implemented and maintained in terms of the license issued by the Commission;

“distribution licensee” means a person who has been granted an electricity distribution license or exempted from the requirement of obtaining a distribution license under the Act;

“earth” means the general mass of the earth;

“earth electrode” means a conductor or group of conductors in intimate contact with, and providing a connection with, earth;

“electric line” means any line used or intended to be used for carrying electricity for any purpose and includes, unless the context otherwise requires -

(a) any equipment connected to any such line for the purpose of carrying electricity; and

(b) any wire, cable, tube, pipe, insulator or other similar thing (including its casing or coating) which surrounds or supports, or is associated with, any such line;

“energy” means electrical energy;

“equipment” includes plant, meters, lines, supports, appliances and associated items used or intended to be used for carrying electricity for the purposes of generating, transmitting or distributing energy or for using or measuring energy;

“generating plant” means those parts of any premises which are principally used for the purpose of generating electrical energy;

“Grid Code” shall mean such technical or operational codes approved by the Commission and required by a transmission licensee to be implemented and maintained in terms of the license issued by the Commission;

“high voltage” means a nominal voltage exceeding 33,000Volts.

“insulation” means non-conducting material enclosing or surrounding a conductor or any part thereof and of such quality and thickness as to withstand the operating voltage of the equipment;
“insulator” means a device which supports a live conductor or which electrically separates the upper and lower parts of a stay wire;

“insulated” will be construed accordingly;

“low voltage” means a nominal voltage exceeding 50 volts and not exceeding 1000 Volts;

“medium voltage” means a nominal voltage exceeding 1000 Volts and not exceeding 33,000 Volts;

“metalwork” does not include any electric line or conductor used for earthing purposes;

“network” means an electric system supplied by one or more sources of voltage and comprising all the conductors and other equipment used to conduct electricity for the purposes of conveying energy from the source or sources of voltage to one or more consumer’s installations, street electrical fixtures or other networks, but does not include an electrical system which is situated entirely on an offshore installation;

“neutral conductor” means a conductor which is or is intended to be, connected to the neutral point of an electrical system and intended to contribute to the carrying of energy;

“new connection” means the first electric line or the replacement of an existing electric line, to one or more consumer’s installations.

“ordinarily accessible” means that the overhead line could be reached by hand if any scaffolding, ladder or other construction was erected or placed on, in, against or near to a building or structure.

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

“performance standards” means electricity distribution performance standards regulations;

“phase conductor” means a conductor for the carrying of energy other than a neutral conductor or a protective conductor or a conductor used for earthing purposes;

“protective conductor” means a conductor which is used for protection against electric shock and which connects the exposed conductive parts of equipment with earth;

“relevant persons” mean all generation licensees, transmission licensees and distribution licensees and persons exempted under section 9 of the Act in obtaining a license;

“safety clearance certificate” means a certificate issued by a relevant person to a person responsible for erecting a building or structure, certifying that there is no apparent danger from his equipment for carrying out such tasks;

“service line” means an electric line which connects either a street electrical fixture, or no more than four consumer’s installations in adjacent buildings, to a distribution Main;

“Sri Lanka Standards Institute” or “SLSI” means the Institute established under the Bureau of Ceylon Standards Act, No. 38 of 1964;

“Sri Lanka Standard requirements” means the Sri Lankan standard requirement for electrical installations specified by the Sri Lanka Standard Institute or 17th Edition of “British Standard Requirements for electrical installations” (BS 7671:2008) or latest;
“street electric fixture” means a permanent fixture which is or is intended to be connected to a supply of electricity and which is in, on, or is associated with a highway;

“substation” means any premises or part thereof which contains equipment for either transforming or converting energy to or from high voltage (other than transforming or converting solely for the operation of switching devices or instruments) or for switching, controlling or regulating energy at high voltage, but does not include equipment mounted on a support to any overhead line;

“supplier” means a person who contracts to supply electricity to consumers;

“supply” means the supplying of electricity to any premises including bulk sales of electricity;

“supply neutral conductor” means the neutral conductor of a low voltage network which is or is intended to be connected with earth, but does not include any part of the neutral conductor on the consumer’s side of the supply terminals;

“supply terminals” means the ends of the electric lines at which the supply is delivered to a consumer’s installation;

“support” means any structure, pole or other device, in, on, by or from which any electric line is or may be supported, carried or suspended and includes stays and struts, but does not include insulators, their fittings or any building or structure the principal purpose of which is not the support of electric lines or equipment and “supported” will be construed accordingly;

“switching device” includes any device which can either make or break a current or both;

“transmission licensee” means a person who has been granted an electricity transmission license;

“underground cable” means any conductor surrounded by insulation which is placed below ground;

Schedule I

DESIGN, COLOURS AND PROPORTIONS OF THE SAFETY SIGN

Regulations 20(b)(i) and 42

1. A safety sign shall incorporate a design, and shall be of the proportions, as shown in the diagram, except that the height of the text may be increased to a maximum of 0.12 x L

2. The triangle, symbol and text shall be shown in black on a yellow background.

3. The symbol shall occupy 30 percent to 50 percent of the area within the triangle.

4. A safety sign may include additional text but any such text –

   (a) Shall be in black; and

   (b) Shall be the same size as the text used on the safety sign,

   And no part of any additional text shall appear on the sign higher than the base of the triangle.
Schedule 2

PART I

HEIGHT ABOVE THE GROUND OF OVERHEAD LINES

Regulation 30

<table>
<thead>
<tr>
<th>Nominal voltages</th>
<th>Over Roads</th>
<th>Along Road</th>
<th>Over other Locations Accessible to Vehicular Traffic</th>
<th>Over other Locations Inaccessible to Vehicular Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not exceeding 1000 Volts</td>
<td>5.5 m</td>
<td>4.9 m</td>
<td>4.9 m</td>
<td>4.6 m</td>
</tr>
<tr>
<td>Exceeding 1000 Volts but not exceeding 11,000 Volts</td>
<td>6.1 m</td>
<td>5.2 m</td>
<td>5.2 m</td>
<td>4.6 m</td>
</tr>
<tr>
<td>Exceeding 11,000 Volts but not exceeding 33,000 Volts</td>
<td>6.4 m</td>
<td>6.1 m</td>
<td>6.1 m</td>
<td>4.9 m</td>
</tr>
<tr>
<td>Exceeding 33,000 Volts but not exceeding 132,000 Volts</td>
<td>6.7 m</td>
<td>6.7 m</td>
<td>6.7 m</td>
<td>6.7 m</td>
</tr>
<tr>
<td>Exceeding 132,000 Volts but not exceeding 220,000 Volts</td>
<td>7.0 m</td>
<td>7.0 m</td>
<td>7.0 m</td>
<td>7.0 m</td>
</tr>
</tbody>
</table>
PART II

DISTANCE FROM BUILDINGS OR STRUCTURES TO OVERHEAD LINES

Regulation 36 and 37

Minimum distances from any building or structure to any position to which a conductor in an overhead line may swing under the influence of wind shall be as specified below:

<table>
<thead>
<tr>
<th>Nominal Voltages</th>
<th>Vertical Distance</th>
<th>Horizontal Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not exceeding 1000 Volts</td>
<td>2.40 m</td>
<td>1.50 m</td>
</tr>
<tr>
<td>Exceeding 1000 Volts but not exceeding 11,000 Volts</td>
<td>2.70 m</td>
<td>1.50 m</td>
</tr>
<tr>
<td>Exceeding 11,000 Volts but not exceeding 33,000 Volts</td>
<td>3.00 m</td>
<td>2.00 m</td>
</tr>
<tr>
<td>Exceeding 33,000 Volts but not exceeding 132,000 Volts</td>
<td>4.10 m</td>
<td>4.10 m</td>
</tr>
<tr>
<td>Exceeding 132,000 Volts but not exceeding 220,000 Volts</td>
<td>5.18 m</td>
<td>5.18 m</td>
</tr>
</tbody>
</table>

PART III

DISTANCE FROM TREES TO OVERHEAD LINES

Regulation 39

The distance identified below may be further increased considering the factors such as tree movement, tree regrowth, overhanging of branches, conductor swing and Falling of a tree/part of a tree, etc.; for different geo-physical conditions, as applicable.

No part of a tree should be allowed above an overhead line within specified horizontal distances.

(a) Low Voltage Overhead Lines

<table>
<thead>
<tr>
<th></th>
<th>Not surrounded by insulation</th>
<th>Surrounded by insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical distance</td>
<td>2.7 m</td>
<td>0.15 m</td>
</tr>
<tr>
<td>Horizontal distance</td>
<td>1.5 m</td>
<td>0.15 m</td>
</tr>
</tbody>
</table>

(b) Medium Voltage Overhead Lines

(i) 11 kV

| Vertical distance | 2.7 m |
| Horizontal distance | 1.5 m |
(ii) 33kV

<table>
<thead>
<tr>
<th>Vertical distance</th>
<th>3.7 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal distance</td>
<td>2.9 m</td>
</tr>
</tbody>
</table>

(c) High Voltage

(i) 132 kV

Within an area of 13.5 m from center line on both sides of the overhead line, trees shall not be grown, unless the licensee determines that it wouldn’t compromise safety. In case the licensee allows trees to be grown, following minimum distances shall be maintained up to swing of 45°:

- 1.4 m from the overhead line if tree cannot support a ladder/climber, and
- 3.6 m from the overhead line if tree is capable of supporting a ladder/climber

Outside the area of 13.5 m from center line on both sides of the overhead line, height of the tree should be at least 5 m less than the distance to the tree from the center line.

(ii) 220 kV

Within the area of 17.5 m from center line on both sides of the overhead line, trees shall not be grown, unless the licensee determines that it wouldn’t compromise safety. In case the licensee allows trees to be grown, following minimum distances shall be maintained up to swing 45°:

- 2.4 m from the overhead line if the tree cannot support a ladder/climber, and
- 4.6 m from the overhead line if the tree is capable of supporting a ladder/climber,

Outside the area of 17.5 m from center line of the overhead line, height of the tree should be at least 5 m less than the distance to tree from the center line.

Schedule 3

NOTIFICATION OF SPECIFIED EVENTS

Regulation 67

PART 1 – EVENTS SPECIFIED IN REGULATION 67(2)(a)

Particulars relating to the person submitting the notice

1. Name, address and telephone number of the person submitting the notice and, if different, corresponding particulars of the person to whom enquiries should be addressed.

2. Date on which the notice is submitted.

3. A unique and sequential reference number indicating, in respect of each year ending on 31st March, the number of the event.

Particulars relating to the event


5. Date and time of event.
6. Persons involved in the event, if any –
   (a) If at work, type of work;
   (b) If not at work, sufficient description to identify status, e.g. house holder, visitor, child;
   (c) Age;
   (d) Sex; and
   (e) Nature of injury, if any.

7. Network details –
   (a) Voltage;
   (b) Equipment at site of event, whether overhead lines, underground cables, distributing mains or service lines, or if other, specify;
   (c) Where relevant, whether the earthing of the low voltage network is by means of protective multiple earthing;
   (d) Extent of operation of circuit protection;
   (e) In respect of events involving overhead lines -
      (i) Height of the electric line at point of contact, if any;
      (ii) Whether or not the electric line remained live on the ground or at a reduced height; and
      (iii) Whether or not the electric line was surrounded by Insulations; and
   (f) In respect of events not involving overhead lines –
      (i) Whether the equipment was situated indoors;
      (ii) Where a substation is involved, a brief description of substation physical security equipment, e.g. brick building, steel doors, nature of fencing; and
      (iii) Whether any security fence was also the perimeter fence.

8. Brief facts of the event, including where known, the cause.

9. Details of any action which has been, or is intended to be, taken to prevent a recurrence of the event.

PART II – EVENTS SPECIFIED IN REGULATION 67(2)(b)

Particulars relating to the person submitting the notice

1. Name, address and telephone number of the person submitting the notice and, if different, corresponding particulars of the person to whom enquiries should be addressed.

2. Date on which the notice is submitted.
3. A unique and sequential reference number indicating, in respect of each year ending on 31st March, the number of the event.

Particulars relating to the event

4. Site of the event-

(a) Address; and

(b) Location within the premises

5. Date of event.

6. Persons involved in the event –

(a) Surname and initials of the deceased person;

(b) If at work, type of work;

(c) If not at work, sufficient description to identify status, e.g. house holder, visitor, child;

(d) Age;

(e) Sex; and

(f) Nature of injury and cause of death.

7. Fatal accident inquiry determinations.

8. Equipment involved in the event –

(a) Equipment directly involved –

   (i) Type and make;

   (ii) Whether it was faulty;

(b) Whether the death was due to a fault involving –

   (i) fixed wiring

   (ii) flexible lead;

   (iii) appliance lead;

   (iv) appliance;

   (v) plug;

   (vi) socket outlet;

   (vii) misuse of Equipment or appliance;
(viii) bare wires;
(ix) taped joints;
(x) broken Neutral Conductor; or
(xi) exposed and live plug pins.

9. Network and Consumer’s Installation details –

(a) Voltage;

(b) Earthing arrangements, whether –
   
   (i) the Earthing connection was loose;
   (ii) the Earthing connection was disconnected;
   (iii) the Earthing connection was in contact with a phase conductor in the plug, the socket, or elsewhere, and if so, where;
   (iv) the Earthing connection was to a water pipe, local earth electrode, cable sheath, aerial earth wire or earthing terminal and, if so, which;
   
   (v) the Earth fault loop impedance was measured and, if so, the measurement obtained;

(c) description of circuit protection; and

(d) Extent of operation of circuit protection.

10. Whether there was evidence of amateur work.

PART III– EVENTS SPECIFIED IN REGULATION 67(2)(C) AND 67(2)(e)

Particulars relating to the person submitting the notice

1. Name, address and telephone number of the person submitting the notice and, if different, corresponding particulars of the person to whom enquiries should be addressed.

2. Date on which the notice is submitted.

3. A unique and sequential reference number indicating, in respect of each year ending on 31st December, the number of the event.

Particulars relating to the event

4. Nature of Site of event, e.g. street, farms, workshops, constructions.

5. Date of event.
6. Whether the persons involved in the event, if any, was –
   (a) at work, and, if so, the type of work;
   (b) not at work, and, if so, sufficient description to identify status, e.g. house holder, visitor, child;

7. Network details –
   (a) Voltage;
   (b) Equipment at site of event, whether overhead lines, underground cables, distributing mains or service lines, or if other, specify;
   (c) Height of the electric line at point of contact, if any;
   (d) Whether or not the electric line remained live on the ground or at a reduced height;
   (e) Whether or not the electric line was surrounded by Insulation;
   (f) Description of circuit protection; and
   (g) Extent of operation of circuit protection.

8. Brief facts of the event, including the cause where known and details of all Equipment involved and the person responsible for the equipment.

9. Details of any action which has been, or is intended to be, taken to prevent a recurrence of the event.

PART IV – EVENTS SPECIFIED IN REGULATION 67(2)(d)

Particulars relating to the person submitting the notice

1. Name, address and telephone number of the person submitting the notice and, if different, corresponding particulars of the person to whom enquiries should be addressed.

2. Date on which the notice is submitted.

3. A unique and sequential reference number indicating, in respect of each year ending on 31st December, the number of the event.

Particulars relating to the event

4. (a) Total number of events, if any, during the 3 months period specified in regulation 67(7), classified as specified in sub-paragraph (b) and as also classified as involving deliberate or accidental contact, damage or interference by each of the following –
   (i) a relevant person, a telecommunication code system operator, a gas transporter, a water sewerage authority, a local or highway authority, or their respective contractors
   (ii) farmers, farm workers or farm implements;
   (iii) private individuals;
(iv) other persons; and

(v) other causes, e.g. corrosion, ground subsidence, faulty manufacture, ageing or deterioration

(b) The classes referred to in sub-paragraph (a) are -

(i) low voltage service lines

(ii) low voltage distributing mains; and

(iii) high voltage electric lines (specifying voltage)

06.06.2016

REGULATIONS MADE UNDER SECTION 54 OF THE SRI LANKA ELECTRICITY ACT, No. 20 OF 2009

BY virtue of the powers vested in me by Section 54 of the Sri Lanka Electricity Act, No. 20 of 2009, and on the recommendation of the Public Utilities Commission of Sri Lanka, I, Ranjith Siyambalapitiya, the Minister of Power and Renewable Energy, do by this order make the undermentioned Regulations on Electricity (Transmission) Performance Standards.

RANJITH SIYAMBALAPITIYA,
Minister of Power and Renewable Energy.

13th July 2016.


SRI LANKA ELECTRICITY ACT, NO. 20 OF 2009

REGULATIONS made by the Minister of Power and Renewable Energy on the recommendation of the Public Utilities Commission of Sri Lanka, under sections 54 of the Sri Lanka Electricity Act, No. 20 of 2009 read with sections 24, 40 and 56 of the aforesaid Act.

**Regulations**

1. These regulations may be cited as the Electricity (Transmission) Performance Standards Regulations No. of 2016.