

PROPOSED
ELECTRICITY (NETWORK SAFETY) AMENDMENT
REGULATIONS 2019

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The following is a list of those regulations to which an amendment is proposed to be made. It does not include any regulations to which deletions are proposed. The deletions are indicated in the Explanatory Memorandum. The proposed amendments are shown in red text.

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Electricity (Network Safety) Amendment Regulations 2019

Part 1 — Preliminary

1. Citation

These regulations are the *Electricity (Network Safety) Amendment Regulations 2019*.

3. Terms used

(1) In these regulations, unless the contrary intention appears —

network means —

- (a) transmission works operated by a network operator; and
 - (b) distribution works operated by a network operator, including —
 - (i) generating works that are connected to the distribution works for the purposes of emergency or interim generation of electricity and that are owned, hired, leased by, or otherwise under the control of, the network operator; and
 - (ii) service apparatus connected to the distribution works, other than service apparatus the property of a consumer or an owner or occupier of premises to which electricity is supplied; and
 - (iii) if the distribution works are used to supply electricity otherwise than to the premises of a consumer — apparatus to which the electricity is supplied; and
 - (iv) **energy storage equipment permanently connected to the distribution works of a network operator and that is owned, hired, leased or otherwise under the control of that network operator,**
- and
- (c) works that would be covered by paragraph (a) or (b) except that they are no longer used to convey or distribute electricity, whether or not the works have been disconnected from generating works or from other transmission or distribution works;

monitor, in relation to a network, includes continuously applying and using supervisory control and data acquisition equipment at a central location to control, when necessary, the flow of electricity and adjust voltage levels within the network, respond to alarms and equipment status changes, dispatch maintenance personnel

and review switching schedules to ensure the safety of persons carrying out planned and unplanned activities on a network;

operate, in relation to a network, includes, but is not limited to, opening and closing electrical equipment in accordance with switching schedules, either manually or remotely, applying and removing earthing conductors and applying test voltages to electrical equipment;

prescribed activity means the, or any thing related to the, conveyance, control, supply or use of electricity done by, for or with the authority of a network operator referred to in regulation 4(1)(a), (b), (c), (d), (e), (f) or (g) carried out in the course of designing, constructing, commissioning, monitoring, operating, maintaining or decommissioning a network and includes an SMS activity;

safety management system activity (SMS activity) means the, or any thing related to the, conveyance, control, supply or use of electricity done by, for or with the authority of, a network operator referred to in regulation 4(1)(a), (b), (c), (d), (e), (f) or (g) carried out in the course of designing, constructing, commissioning, monitoring, operating, maintaining or decommissioning a network;

- (2) For the purposes of these regulations, a reference to the network, in relation to a network operator, is a reference to —
- (a) if the network operator operates one network — that network; or
 - (b) if the network operator operates 2 or more networks — any of those networks.
- (3) For the purposes of these regulations, a prescribed activity is carried out on a network if the prescribed activity is carried out in, on, in connection with or in relation to the network.
- (4) However, if a prescribed activity is carried out in the course of constructing, commissioning, maintaining or decommissioning of the network, the activity is not carried out in, on, in connection with or in relation to the network unless any person involved or thing in contact with such person, plant including any extension of such plant or thing used to carry out the prescribed activity is within the 6 metres space surrounding of the network.

Part 2 — Network safety

Division 1 — General safety requirements

6. Duty of network operator to manage prescribed activities

- (1) A network operator must ensure that each prescribed activity carried out on, **in, in connection with or in relation to** the network is carried out safely.

Penalty: a fine of \$250 000.

- (2) A network operator contravenes subregulation (1) if the network operator fails to —

- (a) develop, implement and maintain adequate work practices relating to prescribed activities; or
- (b) develop, implement and maintain adequate plans for the inspection, maintenance and (if necessary) replacement of the network or parts of it; or
- (c) provide, so far as is reasonably practicable, adequate instruction, training and supervision to persons for whom the network operator is responsible, taking into account the nature of the prescribed activities carried out by those persons and the competence of those persons; or
- (d) ensure, so far as is reasonably practicable, that persons who are carrying out prescribed activities on, **in, in connection with or in relation to** the network, and for whom the network operator is responsible, comply with the design of the network; or
- (e) ensure, so far as is reasonably practicable, that persons who are carrying out prescribed activities on, **in, in connection with or in relation to** the network, and for whom the network operator is responsible, comply with the work practices applicable to the prescribed activities; or
- (f) regularly review the design, engineering and operation of the network, and the work practices applicable to prescribed activities carried out on, **in, in connection with or in relation to** the network, for safety and effectiveness.

- (3) Subregulation (2) does not limit the generality of subregulation (1).

- (4) A network operator must maintain records that are sufficient to demonstrate the extent of the network operator's compliance with its duty under subregulation (1).

- (5) **A network operator must, when developing or adopting work practices, ensure that the work practices are practicable, reasonable and minimise the risks involved when being implemented.**

Penalty: a fine of \$250 000.

7. Duty of contractor to manage prescribed activities

- (1) A contractor must ensure, so far as is reasonably practicable, that each prescribed activity carried out on a network by a person for whom the contractor is responsible is carried out safely.

Penalty:

- (a) for an individual, a fine of \$50 000;
 - (b) for a body corporate, a fine of \$250 000.
- (2) A contractor contravenes subregulation (1) if the contractor fails to —
- (a) provide, so far as is reasonably practicable, adequate instruction, training and supervision to persons for whom the contractor is responsible, taking into account the nature of the prescribed activity carried out and the competence of those persons; or
 - (b) ensure, so far as is reasonably practicable, that persons who are carrying out prescribed activities on, **in, in connection with or in relation to** the network, and for whom the contractor is responsible, comply with the design of the network; or
 - (c) ensure, so far as is reasonably practicable, that persons who are carrying out prescribed activities on, **in, in connection with or in relation to** the network, and for whom the contractor is responsible, comply with the work practices applicable to the prescribed activities.
- (3) Subregulation (2) does not limit the generality of subregulation (1).

8. Duty of persons carrying out prescribed activities

- (1) An individual must, in carrying out a prescribed activity on, **in, in connection with or in relation to** a network, ensure that the activity is carried out safely.
Penalty: a fine of \$50 000.
- (2) An individual contravenes subregulation (1) if the individual, in carrying out the prescribed activity, fails to —
- (a) comply with the design of the network; or
 - (b) comply with the work practices applicable to the prescribed activity.
- (3) Subregulation (2) does not limit the generality of subregulation (1).

9. Duties relating to certain risks to safety

- (1) In this regulation —
- investigate** includes to consider whether or not a work practice or safety management system contributed to a risk to safety;
- risk to safety**, in relation to a network, means —
- (a) anything at a place where a prescribed activity is being carried out on, **in, in connection with or in relation to** a network that **causes, or is likely to cause, a notifiable incident** is a risk to safety; and
 - (b) the condition of any part of the network that **causes, or is likely to cause, a notifiable incident** is a risk to safety.
- (2) If a network operator becomes aware of a risk to safety in relation to a network of the network operator, the network operator must, as soon as is reasonably practicable, investigate the risk.
Penalty: a fine of \$250 000.
- (3) Subregulation (2) does not apply to a risk that is inherent.

- (4) If a person for whom a network operator is responsible becomes aware of a risk to safety in relation to a network of the network operator, the person must, as soon as is reasonably practicable, notify the network operator of the risk, unless the person knows that the network operator has already been notified.

Penalty:

- (a) for an individual, a fine of \$50 000;
- (b) for a body corporate, a fine of \$250 000.

- (5) If an investigation reveals that there is a risk to safety, the network operator must ensure that —
- (a) the risk is minimised or eliminated, as soon as is reasonably practicable; and
 - (b) until the risk is minimised or eliminated, no prescribed activity is carried out on, **in, in connection with or in relation to** any affected part of the network, other than work to minimise or eliminate the risk.

Penalty: a fine of \$250 000.

13. Requirement to have safety management system

- (1) A network operator must have a safety management system that —
- (a) applies to all networks of the network operator; and
 - (b) complies with AS 5577; and
 - (c) **complies with Division 1 of Part 2.**

Penalty: a fine of \$250 000.

- (2) Subregulation (1)(b) is subject to regulation 14.

15. Requirement to comply with safety management system

- (1) A network operator must ensure that each prescribed activity carried out on, **in, in connection with or in relation to** the network is carried out in accordance with the network operator's safety management system.

Penalty: a fine of \$250 000.

- (2) A network operator must ensure that all other requirements of the safety management system (including, without limitation, auditing and record-keeping requirements) are complied with.

Penalty: a fine of \$250 000.

- (3) A contractor must ensure that each prescribed activity carried out on, **in, in connection with or in relation to** the network by the contractor or a person for whom the contractor is responsible is carried out in accordance with the network operator's safety management system.

Penalty:

- (a) for an individual, a fine of \$50 000;
- (b) for a body corporate, a fine of \$250 000.

16. Deleted

Division 3 — Requirements if network operator not required to have safety management system

19. Requirement to comply with obligatory provisions

- (1) A network operator must ensure, so far as is reasonably practicable, that each prescribed activity carried out on, **in, in connection with or in relation to** the network is carried out in such a way as to comply with each obligatory provision that applies to the prescribed activity.

Penalty: a fine of \$250 000.

- (2) A contractor must ensure, so far as is reasonably practicable, that each prescribed activity carried out on, **in, in connection with or in relation to** a network by the contractor, or a person for whom the contractor is responsible, is carried out in such a way as to comply with each obligatory provision that applies to the prescribed activity.

21. Requirement to provide information and training

- (1) A network operator must ensure, so far as is reasonably practicable, that each person for whom the network operator is responsible who carries out a prescribed activity on, **in, in connection with or in relation to** the network —
 - (a) is provided with access to information setting out work standards, procedures and practices that are relevant to the activity and consistent with the requirements of these regulations; and
 - (b) has been given instruction and training, and has been assessed as competent, in the safe application and use of those standards, procedures and practices.

Penalty: a fine of \$250 000.

- (2) A contractor must ensure, so far as is reasonably practicable, that each person for whom the contractor is responsible who carries out a prescribed activity on, **in, in connection with or in relation to** a network —
 - (a) is provided with access to information setting out work standards, procedures and practices that are relevant to the activity and consistent with the requirements of these regulations; and
 - (b) has been given instruction and training, and has been assessed as competent, in the safe application and use of those standards, procedures and practices.

Penalty:

- (a) for an individual, a fine of \$50 000;
- (b) for a body corporate, a fine of \$250 000

22. Terms used

In this Division —

contact, in the definition of **notifiable incident**, includes being close enough for a discharge of electricity to occur;

good work practice means work practice that is accepted as appropriate by the electricity industry;

notifiable incident, in relation to a network, means an incident of any of the following types —

- (a) the discharge of electricity from the network that —
 - (i) causes the electric shock, injury or death of a person or the death of livestock; or
 - (ii) causes a fire, in vegetation, that extends for more than 200 m from its origin; or
 - (iii) causes a fire in a building or structure that is not a part of the network; or
 - (iv) causes a fire in or on a part of the network, other than a fire on a pole; or
 - (v) causes a part of the network to fail in a way that would expose persons in the vicinity to the risk of injury or death (whether or not there was anybody in the vicinity), for example, an explosion; or
 - (vi) was caused by a third party making contact with a part of the network, if that part of the network did not, at the time of the incident, comply with the design and construction standards applicable to that part at the time of its design and construction; or
 - (vii) was caused by a failure, while a prescribed activity was being carried out on, **in, in connection with or in relation** to the network, to follow or apply good work practice in relation to the activity; or
 - (viii) was caused by contact with exposed metal parts of underground cables that were not insulated but should have been according to good work practice;
- (b) the supply of electricity to consumers in a way that does not comply with section 25(1)(d) of the Act and that causes damage to one or more consumer's installations, if the cost of rectifying the damage is likely to exceed \$20 000 in aggregate;
- (c) a consumer's installation becoming unsafe because of an error in —
 - (i) connecting the network to the installation; or
 - (ii) connecting a meter to the installation;
- (d) a faulty neutral connection on the network that affects at least 2 consumers;

protective device means a fuse, circuit breaker, reclosing switch or other device that is designed to interrupt the supply of electricity;

third party, in relation to making contact with a part of a network, means a person other than —

- (a) the network operator; or
- (b) a person instructed or authorised by the network operator to do so.

Schedule 1 — Standards and codes containing evidentiary provisions

[r. 17]

Division 1 — General

AS/NZS 3100:2017 Approval and test specification — General requirements for electrical equipment.

Division 2 — Overhead lines

AS 3891.2-2008 Air navigation — Cables and their supporting structures — Marking and safety requirements — **Low level aviation**.

Division 3 — Switchyards, substations and power stations

AS 60076.1-2014 Power transformers — General.

Division 4 — Underground cables

AS 2832.1-2015 Cathodic protection of metals — Pipes and cables.

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Schedule 2 — Standards and codes containing obligatory provisions

[r. 17]

Division 1 — General

AS 2067-2016 Substations and high voltage installations exceeding 1 kV a.c.

IEC 61914 Ed. 2.0 2015-11 Cable cleats for electrical installations.

Division 2 — Overhead lines

AS 3600-2018 Concrete structures.

AS/NZS 7000:2016 Overhead line design — Detailed procedures.

Division 3 — Underground cables

AS/NZS 3008.1.1:2017 Electrical installations — Selection of cables — Cables for alternating voltages up to and including 0.6/1 kV — Typical Australian installation conditions.

Division 4 — Switchgear and protection

AS/NZS 3439.1:2002 Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies (IEC 60439-1:1999 MOD).

AS/NZS 3439.2:2002 Low-voltage switchgear and controlgear assemblies — Part 2: Particular requirements for busbar trunking systems (busways) (IEC 60439-2 MOD).

AS/NZS 3439.3:2002 Low-voltage switchgear and controlgear assemblies — Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use — Distribution boards (IEC 60439-3:1990, MOD).

AS/NZS 3439.4:2009 Low-voltage switchgear and controlgear assemblies — Particular requirements for assemblies for construction site (ACS) (IEC 60439-4, Ed 2.0 (2004)).

AS/NZS 3439.5:2009 Low-voltage switchgear and controlgear assemblies — Particular requirements for assemblies for power distribution in public networks (IEC 60439-5, Ed 2.0 (2006)).

AS 60947.1-2015 Low voltage switchgear and controlgear — General rules.

AS 62271.203-2012 High-voltage switchgear and controlgear — Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV.