

Explanatory Notes for SL 2002 No. 260

Electrical Safety Act 2002

ELECTRICAL SAFETY REGULATION 2002

Authorising Law

The *Electrical Safety Act 2002* is directed at eliminating the human cost to individuals, families and the community of death, injury and destruction that can be caused by electricity. The purpose of the Act is to establish a legislative framework for:

- preventing persons from being killed or injured by electricity; and
- preventing property from being destroyed or damaged by electricity.

Section 210 of the Act provides the Governor in Council with the head of power for making a regulation. In particular, it provides that a regulation may be made about ways of discharging a person's electrical safety obligation, ways of ensuring the electrical safety of persons or property, electrical licenses, electrical equipment and cathodic protection systems.

Policy Objective of the legislation

The number of deaths and injuries caused by electricity is unacceptable. Queensland has one of the highest electrocution rate of any Australian State, recording:

- over the past 5 years 3.57 fatalities per million people, compared with the Australian average of 2.19; and
- in the year 2000/2001 10 electrical fatalities and 1234 non-fatal electrical accidents (including 34 hospitalisations).

The seriousness of this problem has been recognised in a number of independent reviews and investigations conducted into electrical safety in

Queensland and the Electrical Safety Office¹. These reviews clearly highlighted the need for electrical safety reform that will prevent and minimise the risks to persons from electricity through the introduction of stand-alone legislation and revising the framework that electrical safety is administered and enforced.

The primary objective of the *Electrical Safety Regulation 2002* is to prevent death and injury to all persons from electricity. It will do this by introducing:

- ensuring a workable balance between clarity and flexibility for obligation holders in meeting the safety outcomes required by the *Electrical Safety Act 2002*;
- effective mechanisms to manage the risks associated with working on or near electrical parts;
- greater levels of consumer protection through appropriate electrical licensing requirements for electrical contractors;
- the introduction of safety management systems to provide for integrated electrical safety management by electricity distributors;
- effective incident notifications and reporting procedures; and
- clear nationally consistent standards to be met with respect to the solutions chosen.

Through meeting these objectives a reduction in the number of deaths and injuries will be achieved, and a community standard for electrical safety maintained.

Consistency with authorising Act and other legislation

The *Electrical Safety Regulation 2002* seeks to prevent or minimise a person's exposure to risk of death or injury from electricity by introducing a package of regulations that will target high-risk electrical hazards and improve the mechanisms that support the enforcement framework.

¹ The Independent Review of the Electrical Safety Office, (June 2001) and the Electrical Safety Taskforce Report (April 2001).

This is consistent with the purpose of the *Electrical Safety Act 2002* to prevent the death and injury of persons by electricity and to prevent property from being destroyed or damaged by electricity.

The proposed regulation is not inconsistent with other legislation in Queensland.

Fundamental legislative principles

The *Legislative Standards Act 1992* outlines fundamental legislative principles that require legislation to have sufficient regard to the rights and liberties of individuals and the institution of Parliament. It is considered that the proposed regulation has sufficient regard for these principles.

Consultation

Through the Electrical Safety Taskforce employer and worker representatives, electricity entities and representatives of government departments were consulted. The methodology used by the Taskforce had significant regard for public comment. An Issues Paper was released for public comment in October 2000, which was followed by an interim report January 2001.

An issues paper entitled "*Safer Workplaces, Safer Homes*" was released by the Department of Industrial Relations in November 2001, seeking public comment on a number of issues resulting from the recommendations of the Electrical Safety Taskforce (April 2001) and the Review of the Electrical Safety Office (July 2001).

A Regulatory Impact Statement on the new provisions of the proposed *Electrical Safety Regulation* was released for public comment in May 2002. Further, a Regulatory Impact Statement on the rural industry exemption for workplaces was released for public comment in August 2002.

Consultation has also been undertaken with key industry stakeholders including the Communications, Electrical and Plumbing Union (CEPU), National Electrical and Communications Association (NECA), Powerlink, Ergon Energy, Energex, Australian Industry Group, the Electrical Workers' and Contractors' Board and the Rural Industry Sector Standing Committee.

NOTES ON PROVISIONS

Part 1 – Preliminary

Clause 1 states the short title of the regulation – the *Electrical Safety Regulation 2002.*

Clause 2 provides that the Regulation commences on 1 October 2002.

Clause 3 outlines the purpose of the Regulation. This includes ensuring the electrical safety of all persons, enhancing consumer protection for electrical work, stopping cathodic protection systems interfering with property, ensuring safe supply of electricity and ensuring electrical equipment hire or sold is safe.

Clause 4 outlines how the purposes of the Regulation are to be achieved. This includes prescribing ways of discharging electrical safety obligations, including introducing restrictions on live work and working near exposed electrical parts. It also introduces new requirements for safety management plans for prescribed electricity entities and for incident reporting and notification. The Regulation will also prescribe matters in support for electrical licences, approvals of electrical equipment and the registration of cathodic protection systems.

Clause 5 provides for a dictionary of particular words to be used in the Regulation. The dictionary in Schedule 8 contains the definitions for these words. The clause also provides a word has the same meaning as the Wiring Rules were the word is used in the Wiring Rules word if it is not defined in the Regulation or the Act.

Clause 6 provides how references to standards and other documents are to be made. This includes Australian/New Zealand Standards and publications of the Electricity Supply Association of Australia.

Clause 7 provides the meaning of "qualified individual". A qualified individual is a person who meets requirements necessary for eligibility for an electrical contractors licence for an individual or endorsement on the electrical contractors licence for a partnership or corporation.

Part 2 – Electrical work

Division 1 – Preliminary

Clause 8 provides that the purpose of division 2 — Basic Requirements for electrical work, division 3 — performance of high voltage live line work, division 4 — testing of work and division 5 — requirements applying to employers and self-employed persons is to prescribe a way of discharging the electrical safety obligation of an employer or self-employed person.

Division 2 – Basic requirements for electrical work

Clause 9 provides the definitions for this division. In this division "electrical work" does not include high voltage live line work as this work is subject to requirements in clause 13.

Clause 10 provides that the division applies to the performance of electrical work for the purpose of a business or undertaking of an employer or a self-employed person.

Clause 11 provides that an employer or self-employed person must ensure that live work is not performed unless allowed by this division.

For example, a licensed electrical contractor must ensure that a licensed electrical mechanic does not connect electrical cables to a switchboard that is not effectively isolated at another switchboard or where energised parts of the switchboard are not insulated.

In determining whether the work is live work the employer or self-employed person must ensure that each exposed conductor is treated as energised until it is isolated and proved de-energised or each exposed high voltage conductor is earthed.

The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 12 provides the circumstances in which live work is allowed. This is where it is not practicable to perform the electrical work other than by live work because:

• it is necessary in the interests of safety, whether or not electrical safety, for the work to be performed while the electrical equipment the subject of the electrical work is energised;

- For example, it may be necessary in the interests of road safety for a set of traffic lights to remain operating while electrical work is performed on the lights.
- a supply of electricity is necessary for the proper performance of the electrical work; and

For example, live work maybe necessary for a television technician testing a television set to establish which components are faulty and which components are functioning correctly.

For example, live work may be necessary where an electrical mechanic is testing an installation to ensure phase rotation or circuit connections have correct polarity.

• there is no reasonable alternative to performing live work.

For example, live work may be necessary to perform work on a transmission tower to avoid widespread outages.

For example, there maybe no reasonable alternative to performing live work on electrical equipment in a smelter that operates continuously.

The clause also provides that the work be performed in accordance with a safe system of work and other safety requirements (for example safety equipment). These requirements also include using a safety observer for work that does not involve testing of electrical equipment.

For example, a safety observer may not be required where a licensed electrical worker is testing a washing machine to ensure the current rating of the motor is within acceptable limits and that the circuit is operating correctly.

Division 3 – High voltage live line work

Clause 13 provides the requirements for performing high voltage live line work. This includes obtaining written authorisation from the person in control of the electrical equipment the subject of the work and performing the work in accordance with a high voltage live line work management plan.

Examples of person in control of the electrical equipment:

- an electricity entity who owns a high voltage line;
- the owner of a high voltage line.

This clause also sets out the requirements necessary for a person to be authorised to perform this work and the requirements for the high voltage live line work management plan. The maximum penalty for contravening subclause (1) and (3) is 40 penalty units.

Division 4 – Testing of work

Clause 14 provides that a person who performs electrical work must test the work to ensure the electrical safety of all persons and property. This includes:

• ensuring the electrical safety of persons not necessary for the performance of the testing; and

For example, when testing an electrical installation a licensed electrical worker must ensure that other persons cannot contact live parts in a switchboard that is open or contact parts that may become energised during the testing by limiting access to the area.

• ensuring the electrical equipment, to the extent it is affected by the electrical work, is electrically safe.

For example, after repairing a dishwasher a licensed electrical worker may test the insulation and earthing from the plug to the metal frame to ensure it is electrically safe. This would include ensuring the values comply with the relevant Australian Standard.

The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 15 requires a licensed electrical contractor who performs electrical work that must be tested under this division to provide a certificate to the person they performed the electrical work for. The certificate must certify that the electrical equipment, to the extent it is affected by the electrical work, is electrically safe. The contractor must keep a copy of the certificate for 5 years. The maximum penalty for contravening subclauses (1) and (5) is 40 penalty units.

Division 5 – Requirements applying to employers and self-employed persons

Clause 16 provides that this division applies to the performance of electrical work for the purpose of the business or undertaking of an employer or self-employed person.

Clause 17 provides the requirements on an employer or self-employed person in relation to the testing and maintenance of safety equipment and personal protective equipment used in the performance of electrical work.

Safety equipment that can be visually confirmed as being correctly functioning and safe does not need to be tested every six months.

An example of safety equipment that can be visually confirmed as being correctly functioning and safe is a pair of safety glasses or an extension ladder.

The maximum penalty for contravening subclauses (1) is 40 penalty units.

Records of test must be kept for 5 years. The maximum penalty for contravening subclauses (2) is 40 penalty units.

This clause continues the requirements under s136 of the *Electricity Regulation 1994*.

Clause 18 provides the requirements on an employer or self employed person to ensure the suitability of testing instruments. Testing instruments that can be visually confirmed as being correctly functioning and safe do not need to be tested every six months.

An example of testing equipment that can be visually confirmed as being correctly functioning and safe would be a set of test lamps.

The maximum penalty for contravening subclauses (1) is 40 penalty units.

Records of test must be kept for 5 years. The maximum penalty for contravening subclauses (2) is 40 penalty units

This clause continues the requirements under s137 of the *Electricity Regulation 1994*.

Division 6 – Other requirements

Clause 19 provides that a licensed electrical worker must not connect electrical equipment to a source of electricity for its intended use if the equipment has a serious defect.

An example of electrical equipment with a serious defect would be an electric stove that had faulty earthing.

The maximum penalty for contravening this clause is 40 penalty units.

Clause 20 provides the requirements for signs on switches and disconnection points. This clause continues the requirements under s139 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2), (3) and (4) is 40 penalty units.

Clause 21 provides that an employer must ensure workers performing or helping to perform electrical work are competent in rescue and resuscitation. This clause continues the requirements under s132 of the

Electricity Regulation 1994. The maximum penalty for contravening this clause is 40 penalty units.

Division 7 – Documents about electrical work

Clause 22 provides that this division applies to the performance of electrical work as part of the business or undertaking of a licensed electrical contractor.

Clause 23 provides who may sign documents required under the Act, or that are required by an electricity entity about the performance of electrical work. This clause continues the requirements under s35 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 20 penalty units.

Division 8 – General provisions

Clause 24 provides that a person must not, in trade or commerce, represent that someone who is not a licensed electrical worker may lawfully connect to supply electrical equipment that can only be connected by a licensed electrical worker or do work that may only be done by a licensed electrical worker. An employer must ensure that their workers do not contravene this clause.

This clause continues the requirements under s172 of the *Electricity Regulation 1994*. The maximum penalty for breaching subclause (1) and (2) is 40 penalty units.

Part 3 – Licensing

Division 1 – Electrical work licences

Clause 25 provides the classes of electrical work licences that may be issued by the chief executive.

Clause 26 provides that an electrical mechanic licence authorises the holder to perform all electrical work subject to any conditions or restrictions in the licence.

Clause 27 provides that an electrical linesperson licence authorises the holder to perform all electric line work subject to any conditions or restrictions in the licence.

Clause 28 provides that an electrical fitter licence authorises the holder to perform all electrical equipment work subject to any conditions or restrictions in the licence.

Clause 29 provides that an electrical jointer licence authorises the holder to perform electrical work involving installing, jointing and terminating covered cables to the extent the work requires specialised knowledge or skill, and electrical equipment work necessary to perform these activities, subject to any conditions or restrictions in the licence.

Clause 30 provides that a restricted electrical work licence authorises the holder to perform electrical work only of a particular type stated in the licence. This does not entitle the holder to another electrical licence and must not be taken into account in deciding whether the holder is qualified to obtain or hold another electrical work licence.

Clause 31 provides that an electrical work training permit authorises the holder to perform electrical work stated in the permit in accordance with the conditions about training stated in the permit. This does not entitle the holder to another electrical licence and must not be taken into account in deciding whether the holder is qualified to obtain or hold another electrical work licence.

Clause 32 provides that an external licence is equivalent to the electrical work licence mentioned in schedule 1.

Division 2 – Electrical work licence requirements

Clause 33 provides the general requirements for the issue of an electrical work licence other than an electrical work training permit.

The chief executive must be satisfied that the applicant meets eligibility requirements, is able to understand, read and write English and is trained in, and is competent to carry out resuscitation.

The chief executive can consider any disciplinary action taken under a law regulating activities of licensed electrical workers or the applicant's non-performance of an obligation under a law about electrical work and the reasons for non-performance.

This clause continues s 40 of the *Electricity Regulation 1994*.

Clause 34 provides the eligibility requirements for an electrical mechanics licence. This clause continues the requirements under s44 of the *Electricity Regulation 1994*.

Clause 35 provides the eligibility requirements for an electrical linespersons licence. Refer to clause 215, which provides transition for persons eligible under s47 of the *Electricity Regulation 1994*.

Clause 36 provides the eligibility requirements for an electrical fitter licence. This clause continues the requirements under s43 of the *Electricity Regulation 1994*.

Clause 37 provides the eligibility requirements for an electrical jointer licence. Refer to clause 214, which provides transition for persons eligible under s46 of the *Electricity Regulation 1994*.

Clause 38 provides the eligibility requirements for a restricted electrical work licence. This clause continues the requirements under s48 of the *Electricity Regulation 1994*.

Clause 39 provides that the term of an electrical mechanic licence, an electrical linesperson licence, an electrical fitter licence, an electrical jointer licence and a restricted electrical work licence is a maximum of 5 years. The term for an electrical work training permit is a maximum of 1 year.

Division 3 – Electrical contractor licence requirements

Clause 40 provides the eligibility requirements for an electrical contractor licence for an individual. This includes the individual being a qualified individual and satisfying the financial and insurance requirements (refer to Clause 43). The contractor licence is automatically cancelled if the individual stops being a qualified individual. This clause continues the requirements under s52 of the *Electricity Regulation 1994* but has been expanded to cover all electrical work.

Clause 41 provides the eligibility requirements for an electrical contractor licence for a partnership. This includes the partnership having one qualified person, satisfying the financial and insurance requirements (refer to Clause 43) and satisfying the chief executive that the work to be performed by the partnership. The qualified person is endorsed on the licence. This clause continues the requirements under s54 of the *Electricity Regulation 1994* but has been expanded to cover all electrical work.

Clause 42 provides the eligibility requirements for an electrical contractor licence for a corporation. This includes the corporation having at least one qualified person, satisfying the financial and insurance requirements (refer to Clause 43) and satisfying the chief executive that the work to be performed by the corporation is to be performed, or supervised by a qualified person for the corporation. This clause continues the requirements under s56 of the *Electricity Regulation 1994* but has been expanded to cover all electrical work.

Clause 43 provides the financial and insurance requirements for an applicant for an electrical contractors licence. This includes having appropriate public liability insurance of \$5,000,000 and having net realisable assets or evidence from a financial institution of available funds to a certain level (for a corporation \$10,000, for an individual \$5,000). This clause continues the requirements under s60 of the *Electricity Regulation 1994*.

Clause 44 provides the procedure to be followed if there is a change in the name of a corporation or a partnership that is the holder of an electrical contractor licence. This includes within 1 month of the change giving notice of the change and what action is requested of the chief executive. This clause continues the requirements under s65 of the *Electricity Regulation 1994*.

The maximum penalty for contravening subclause (2) is 20 penalty units.

Clause 45 provides the procedures to be applied if there is a change in the membership of a partnership that holds an electrical contractor licence. This change can be the death or retirement of a member or the admission of a new member. This includes within 1 month of the change giving notice of the change and what action is requested of the chief executive. This clause continues the requirements under s65 of the *Electricity Regulation 1994*.

The maximum penalty for contravening subclause (2) is 20 penalty units.

Clause 46 provides that the term of an electrical contractors licence is a maximum of 1 year.

Division 4 – Miscellaneous

Clause 47 provides that the chief executive must be satisfied that an applicant for the renewal or reinstatement of an electrical licence continues to satisfy the eligibility requirements under this Part to renew or reinstate the licence.

Clause 48 provides that an application in relation to an electrical licence under the Act or under this part must be made in the approved form and accompanied by any fixed fee. This clause continues the requirements under s41 of the *Electricity Regulation 1994*.

Clause 49 provides that the holder of an electrical licence must, where requested by the chief executive, give the licence to the chief executive if the licence has been cancelled, suspended, expired or is required to be endorsed by the chief executive. This clause continues the requirements under s73 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 20 penalty units.

Clause 50 provides if the chief executive is satisfied on application by the holder of an electrical licence that the licence has been lost, damaged or destroyed, the chief executive may issue a replacement licence. This clause continues the requirements under s74 of the *Electricity Regulation 1994*.

Clause 51 provides that the holder of an electrical licence may surrender the licence by giving written notice to the chief executive. This clause continues the requirements under s64 of the *Electricity Regulation 1994*.

Clause 52 provides that the chief executive must keep a register containing information about electrical licences. This includes details of any disciplinary action taken by the licensing committee. This clause continues the requirements under s75 of the *Electricity Regulation 1994*.

Clause 53 provides that the chief executive in deciding a person's competency under this Part may decide that the person must undertake an examination or finish a course of instruction.

For example, to decide a person's competency as a qualified individual for an electrical contractor licence the chief executive may require the person to meet the outcomes of a particular course relevant to electrical contracting through an examination conducted by an external organisation.

This clause continues the requirements under s76 of the *Electricity Regulation 1994*.

Clause 54 provides that the chief executive may appoint examiners to conduct examinations or tests. This clause continues the requirements under s77 of the *Electricity Regulation 1994*.

Clause 55 provides that if the chief executive does not approve an application for the issue, renewal or reinstatement of an electrical licence the licence administration part of the fixed fee must be refunded. The licence administration part is that part of the fixed fee to administer the licence once it is issued, renewed or reinstated. It does not include the part

of the fee to administer the application for the issue, renewal or reinstatement of an electrical licence.

Clause 56 provides that the holder of a contractor licence comply with certain advertising requirements. This clause continues the requirements under s80 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 57 provides, for the purpose of s55(3)(d) of the Act, types of testing that is authorised to be performed without an electrical licence. This includes:

• the testing of electrical equipment by a competent person, if the testing is required under part 5, division 5;

For example, a competent person testing an electric drill in a workplace to ensure it is electrically safe.

• the testing of works of an electricity entity by a competent person; and

For example, a competent paraprofessional with appropriate skills, supervising high voltage tests for a transformer or cable forming part of works of an electricity entity.

• the testing of electrical equipment by a person, other than testing in subparagraph (a) and (b), if it does not interfere with the integrity of the electrical equipment.

For example, a homeowner who is testing the operation of a safety switch by pressing the test button.

For example, a person who is measuring voltage by using appropriate equipment and a safe system of work.

Part 4 – Working around electrical parts

Division 1 – Preliminary

Clause 58 provides that this part prescribes a way of discharging the electrical safety obligation of an employer to ensure that their business or undertaking is conducted in a way that is electrically safe. In particular, it prescribes requirements about performing work in contact with, or near to electrical parts.

Clause 59 provides the definitions for this part. "Work" within this Part means work of any type, whether or not electrical work, except for live

work, and electrical welding performed in accordance with a safe system of work.

For example, a mechanical fitter working on hydraulic parts associated with electrical equipment or a painter working with a paint roller near powerlines, are performing work under this part.

For example, a licensed electrical worker performing high voltage live line is not performing work under this part.

Clause 60 provides the meaning of direct contact with an electrical part for a person, operating plant or a vehicle.

For example, a person touching an insulated overhead service line at the near the facia board of a house with their bare hands or an aluminium ladder is in direct contact with the electrical part.

Clause 61 provides the meaning of "exclusion zone" for a person, operating plant or vehicle. It is the area between the part and the distance from the electrical part and the person, operating plant or vehicle stated in Schedule 2.

A reference in Schedule 2 to a person includes any article of clothing worn by the person, and any conductive object the person is holding or carrying.

For example, a worker working near uninsulated high-voltage parts, using a metal spanner. In this case the spanner or clothing worn by the worker must be kept outside the exclusion zone because of the danger of electricity "arcing" to the spanner or clothing that may be conductive due to dampness from perspiration.

A reference to an authorised person or instructed person who does not have a safety observer as required in Schedule 2 must be taken to be an untrained person. Where operating plant is near powerlines the safety observer is able to advise the authorised person if the plant is coming within the exclusion zone.

A reference in Schedule 2 to a vehicle does not include an aircraft or a vehicle that is operating plant. This is because the risks and control measures applicable to aircraft and operating plant differ.

For example the exclusion zone for an untrained person would apply to the aircraft unless specific work methods are developed and agreed with the owner of the line, in which case the limits for an authorised person would apply. The exclusion limits would include conductive parts of the aircraft.

Division 2 – Requirements for working around electrical parts

Clause 62 provides an employer or self-employed person must ensure that work performed in their business or undertaking does not involve:

- a person coming into direct contact with an electrical part;
- any operating plant or vehicle coming into direct contact with an electrical part;
- a person coming within the exclusion zone for the electrical part; or
- any operating plant or vehicle coming within the exclusion zone for the operating plant or vehicle for an electrical part.

For example, an employer must ensure a gravel truck (not unloading) driven by an untrained person under a bare high voltage power line at a building site does not encroach on the exclusion zone for a vehicle as detailed in Part 1 of Schedule 2.

This does not apply if otherwise provided for in this Part or if the electrical part:

- is a low voltage electric line; and
- a person is an authorised or instructed person for the electrical part, or the operating plant is being operated by an authorised person or an instructed person with a safety observer.

For example, an authorised person, using a safety observer and a safe system of work, operating plant involved in replacing a power pole for a low voltage electric line.

The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 63 provides that work may be performed involving a person coming into direct contact with an electrical part where the part is isolated from electricity, is confirmed to be isolated and not likely to become re-energised and if the electrical part is high voltage, effectively earthed.

For example, a person working on electrical equipment where the electrical equipment has been isolated from supply and tested to confirm isolation and other measures are in place to prevent the equipment becoming re-energised.

This clause contains the requirements under s129 of the *Electricity Regulation 1994*.

Clause 64 provides that work may be performed involving a person, operating plant or a vehicle coming within an exclusion zone if the person, operating plant or vehicle does not make direct contact and the part is isolated from electricity, is confirmed to be isolated and not likely to

become re-energised and if the electrical part is high voltage, effectively earthed.

For example, a crane encroaching on the exclusion zone for a high voltage power line that had been isolated from supply and measures are adopted to ensure the line is not likely to be re-energised, and the line is effectively earthed.

This clause contains the requirements under s130 of the *Electricity Regulation 1994*.

Part 5 – Electrical Installations

Division 1 – Performing electrical work

Clause 65 provides that the purpose of this division is, to the extent it applies or is capable of applying to an employer or self-employed person, to prescribe a way of discharging the electrical safety obligation of an employer or self-employed person to ensure that the person's business or undertaking is conducted in a way that is electrically safe.

Clause 66 provides that a licensed electrical worker who performs electrical work on an electrical installation must ensure that the electrical installation, to the extent affected by the work, is in accordance with the provisions of the wiring rules.

For example, a licensed electrical mechanic, having installed a light circuit must carry out tests to ensure the lighting circuit complies with the requirements of the Wiring Rules.

This Clause continues the requirements under s149 of the *Electricity Regulation 1994*. The maximum penalty for a contravention of this clause is 40 penalty units.

Clause 67 provides that a licensed electrical contractor who employs a licensed electrical worker must ensure that the electrical installation, to the extent affected by electrical work is in accordance with the provisions of the wiring rules.

For example, an electrical contractor must have implemented procedural requirements to ensure that a licensed electrical mechanic who installs a light circuit carries out tests to ensure the lighting circuit complies with the requirements of the Wiring Rules.

The maximum penalty for a contravention of this clause is 40 penalty units.

Clause 68 provides that a person must not perform work on water equipment unless a person is a licensed electrical worker and they would be

authorised to perform work of that type under their licence if the equipment was electrical equipment.

For example, a person must not install a 12 V light fitting in a swimming pool unless they are a licensed electrical worker who would be authorised to perform work of that type on electrical equipment.

For example, a person would be able to replace parts of a chlorinator operating at 12 V which is designed to be replaced by a person without electrical knowledge or skill, without being a licensed electrical worker.

The electrical equipment the subject of the work must be is in accordance with the provisions in the wiring rules. An employer or self-employed person whose business or undertaking involves work on water equipment must ensure a person does not perform work in contravention of this clause. The maximum penalty for contravening subclause (1) or (2) is 40 penalty units.

Clause 69 provides that a person must not perform work on an electric motor forming part of a vehicle unless a person is a licensed electrical worker and the person would be authorised to perform work of that type if the motor was electrical equipment.

For example, a person must not perform work on an 800 V D.C. motor that drives the wheel of a mine vehicle, unless they are a licensed electrical worker who is able to perform work of that type on electrical equipment.

An employer or self-employed person whose business or undertaking involves work on electric motors must ensure a person does not perform work in contravention of this clause.

The maximum penalty for contravening subclause (1) or (2) is 40 penalty units.

Division 2 – Defects and earthing

Clause 70 requires a person in control of electrical equipment to take all reasonable steps to fix a defect affecting the electrical safety of electrical equipment if an inspector or electricity entity gives the person written notice of the defect. It does not matter if the defect is not serious.

For example, a frayed lead on a toaster may be a defect. This is not a serious defect as the lead does not have an exposed wire. A homeowner made aware of the defect by an inspector must have the lead fixed, as it may deteriorate leaving exposed wires.

The maximum penalty for contravening this clause is 40 penalty units.

Clause 71 provides that the person in control of a low voltage electrical installation must not allow the earthing of the installation to be inconsistent with the earthing system requirements of an electricity entity under this regulation. This clause continues the requirements under s151 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Division 3 – Electric lines

Clause 72 provides that a person in control of an electrical installation must maintain their facilities for attaching an overhead service line to installation or for the entrance, support, protection and termination of an underground service line supplying the installation.

For example, the owner of domestic premises that receives electricity from a distribution entity must maintain a riser bracket provided to attach a service line to.

This does not require the person to insulate or maintain insulation supplied for the purpose of any joint needed for consumer terminals. This is to be periodically inspected and maintained by the electricity entity.

For example, an electricity entity has a maintenance program that includes inspecting and maintaining the integrity of the insulation for the clamp joining the service to the consumers wiring.

This clause continues the safety requirements under s110 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 73 provides that the person in control of an electrical installation must ensure that any structure supporting an electric line or item of electrical equipment forming part of the person's electrical installation complies with the wiring rules and any direction of the chief executive given for ensuring electrical safety.

This Clause continues the requirements under s150 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 74 provides that a person in control of an electrical installation must ensure the reasonable maintenance of the integrity of the insulation of any electric line or connection to an electric line that is part of the person's installation. This clause continues the requirements under s155 of the *Electricity Regulation 1994.* The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 75 provides that the person in control of an overhead electric line, except where it forms part of the works of an electricity entity, must ensure that trees and flora are trimmed and other measures taken to ensure electrical safety of persons and property. This clause continues the requirements under s117 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 76 provides the requirements for a person in control of an electrical installation if the service line is disconnected from electricity supply. This clause continues the requirements under s117 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Division 4 – Installation of approved safety switches in domestic residences

Clause 77 provides the definitions for Division 4.

Clause 78 provides that the transferor of residential land must give written notice to the transferee regarding the existence (or otherwise) of an approved safety switch for all general purpose socket-outlets in the domestic residence. The notice must be given on or before the date of possession for the land.

This does not apply to contracts for the transfer of residential land that was entered into prior to 1 September 2002.

This clause continues the requirements under s157C of the Electricity Regulation 1994. The maximum penalty for contravening subclause (1) or (3) is 15 penalty units.

Clause 79 specifies the information the transferor of residential land must provide to the regulator in writing, within 90 days after the date of possession of the land. The maximum penalty for contravening subclause (1) is 15 penalty units.

In order to simplify the process for the transferor, this requirement can be met by submitting a properly completed Form 24 – Property Transfer Information Form to the Queensland Land Registry as part of the registration process under the *Land Title Act 1994* and the *Land Act 1994*.

This does not apply to contracts for the transfer of residential land entered into prior to 1 September 2002.

This clause continues the requirements under s157D of the *Electricity Regulation 1994*.

Clause 80 provides requirements for an owner of the domestic residence on residential land transferred after 1 September 2002, which does not have an approved safety switch installed on general purpose socket outlets. The owner must within 3 months after the date of possession, have an approved safety switch installed for all general purpose socket-outlets.

This clause continues the requirements under s157E of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 15 penalty units.

Clause 81 outlines the circumstances under which licensed electrical contractors and workers are prohibited from undertaking electrical installation work on a domestic residence which does not have an approved safety switch installed on general purpose socket outlets. This clause continues the requirements under s157F of the *Electricity Regulation 1994*.

The maximum penalty for contravening this clause is 40 penalty units.

Division 5 – Workplace electrical installations

Subdivision 1 – Preliminary

Clause 82 provides that this division prescribes a way of discharging the electrical safety obligation of an employer or self-employed person to ensure that the person's business or undertaking is conducted in a way that is electrically safe.

Clause 83 provides the definitions for Division 5.

Subdivision 2 – All work

Clause 84 provides that this division applies to an employer, worker or self-employed person who performs work at a workplace. This work does not need to be electrical work.

Clause 85 provides the requirements for cord extension sets or flexible cables. This clause continues the requirements under s147 of the current *Workplace Health and Safety Regulation 1997*.

Subdivision 3 – Class 1 work

Clause 86 provides that the subdivision applies to the performance of class 1 work at a workplace.

Clause 87 provides that an employer or self-employed person must ensure that any electrical equipment for the performance of work is in accordance with the requirements of AS/NZS 3012 (Electrical installations–Construction and demolition sites). It also provides that an employer or self-employed person whose business or undertaking is the principal contractor for a construction workplace must ensure that any construction wiring for the workplace is in accordance with the requirements of AS/NZS 3012. These requirements do not take effect until 1 March 2003. Part 14, division 4 continues the existing requirements from the *Workplace Health and Safety Regulation* 1997 until 28 February 2003.

Subdivision 4 – Class 2 work

Clause 88 provides that this subdivision applies to the performance of class 2 work at a workplace.

Clause 89 provides that the use of double adaptors and piggyback plus is prohibited. This clause continues the requirements under s158 of the *Workplace Health and Safety Regulation 1997*.

Clause 90 provides the requirements for testing and tagging and the use of safety switches for specified electrical equipment. This clause continues the requirements under s159 of the *Workplace Health and Safety Regulation 1997*.

Clause 91 provides the requirements for testing safety switches. This clause continues the requirements under s152 of the *Workplace Health and Safety Regulation 1997*.

Subdivision 5 – Class 3 or 4 work

Clause 92 provides that this subdivision applies to the performance of class 3 or 4 work at a workplace.

Clause 93 provides the requirements for testing and tagging or using a safety switch for specified electrical equipment. This clause continues the requirements under s163 of the Workplace Health and Safety Regulation 1997.

Clause 94 provides the requirements for testing safety switches. This clause continues the requirements under s164 of the *Workplace Health and Safety Regulation 1997*.

Part 6 – Electrical Equipment

Division 1 – Preliminary

Clause 95 provides the definitions for Part 6.

Clause 96 provides the meanings of "prescribed class" and "prescribed type" of electrical equipment.

For example, a class of prescribed electrical equipment is an iron for electrical equipment that is used to iron clothes in a home. A type of this class of prescribed electrical equipment would be a brand of iron that has been approved for sale. This type would be tested to confirm compliance with the electrical safety requirements of the Australian Standard for electric irons.

Clause 97 provides the meaning of relevant standard. This clause continues the requirements under s6 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 98 provides that a type of electrical equipment is "Queensland approved" if it is a type of a prescribed class of equipment and the type has been approved under this Part. This clause continues the requirements under s7 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 99 provides that a type of electrical equipment is "externally approved" if it is a type of a prescribed class of electrical equipment and the type has been approved by an external approvals entity. This clause continues the requirements under s8 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 2 – Restriction on hire or sale of particular items of electrical equipment

Clause 100 provides that a person cannot sell an item of electrical equipment of a prescribed class unless it has been approved, marked and complies with the relevant standard for the type. This clause continues the requirements under s9 of the *Electricity (Electrical Articles) Regulation 1994*. The maximum penalty for contravening this provision is 40 penalty units.

Division 3 – Queensland approvals of types of electrical equipment of prescribed classes

Clause 101 provides the requirements for applying to the chief executive for approval of a type of electrical equipment of a prescribed class of electrical equipment. This clause continues the requirements under s10 of the *Electricity (Electrical Articles) Regulation 1994.*

Clause 102 provides requirements for the chief executive when approving a type of electrical equipment. This clause continues the requirements under s11 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 103 provides that the term of the approval is 5 years. This clause continues the requirements under s13 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 104 provides that the chief executive must keep a register of approved types of electrical equipment. This clause continues the requirements under s118 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 4 – Changes to approvals

Clause 105 provides that an approval holder has to provide the chief executive written notice of a change of name or address. This clause continues the requirements under s14 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 106 provides that an approval holder can apply to the chief executive to change the approval of the type of electrical equipment to

include an approval of another type that is not substantially different. This clause continues the requirements under s16 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 107 provides the requirements for a chief executive to change the approval of an existing type of electrical equipment to include another type that is not substantially different. This clause continues the requirements under s17 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 5 – Transfer and cancellation of approvals

Clause 108 provides the requirements for a proposed transferee of an approval of a type of electrical licence to apply to the chief executive for approval of the transfer. This clause continues the requirements under s19 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 109 provides when the chief executive may cancel approval of a type of electrical equipment. This clause continues the requirements under s20 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 110 provides the procedure the chief executive must follow if the chief executive considers a ground to exist to cancel the approval of a type of electrical equipment. This clause continues the requirements under s21 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 111 provides that within 14 days of being given notice of a cancellation of an approval of a type of electrical equipment, the approval holder must give the chief executive the approval certificate. This must be complied with unless the holder has a reasonable excuse. This clause continues the requirements under s22 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 6 – Marking of approved electrical equipment

Clause 112 provides that an item of electrical equipment of a type approved under this part must be marked in accordance with this part. This clause continues the requirements under s23 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 113 provides the marking requirements for an item of electrical equipment of a type approved that is too small to be marked, or for another

reason should not be marked. This clause continues the requirements under s24 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 7 – Chief executive may require testing of item of electrical equipment of approved type

Clause 114 provides that the chief executive can decide that an item of electrical equipment of a type approved should be tested and examined for compliance with the relevant standard. This clause continues the requirements under s25 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 115 provides the procedure the chief executive must follow to have an item of electrical equipment of a type approved tested and examined. This clause continues the requirements under s26 of the *Electricity (Electrical Articles) Regulation 1994.*

Clause 116 provides that before an item is tested or examined under this part it must be given an identifying mark. This clause continues the requirements under s27 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 117 provides that the chief executive must bear the cost of any tests and examinations under this Part and compensate the approval holder for any damage done unless the item does not substantially comply with the relevant standard. This clause continues the requirements under s28 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 118 provides for the return of an item of electrical equipment given to the chief executive for testing and examination or with an application under this part. This clause continues the requirements under s30 of the *Electricity (Electrical Articles) Regulation 1994.*

Division 8 – Nonprescribed electrical equipment

Clause 119 provides that the chief executive may implement a programme for the issue of certificates for non-prescribed electrical equipment of its suitability for connection to supply. This clause continues the requirements under s31 of the *Electricity (Electrical Articles) Regulation 1994*.

Clause 120 provides that a person cannot sell an item of nonprescribed electrical equipment to which the safety criteria in AS/NZS 3820 applies unless the equipment complies with that standard. This clause continues the requirements under s31A of the *Electricity (Electrical Articles) Regulation 1994*.

Division 9 – Prohibition of hire or sale of particular electrical equipment

Clause 121 provides that the chief executive may prohibit the hire, sale or use of an item of electrical equipment if they belief on reasonable grounds that the item does not comply with the safety criteria in AS/NZS 3820. This clause continues the requirements under s32 of the *Electricity (Electrical Articles) Regulation 1994*.

Division 10 – Second-hand electrical equipment

Clause 122 provides the requirements on persons conducting a business or undertaking including selling items of second-hand electrical equipment. A person must not sell second-hand electrical equipment unless they give the purchaser information about whether the item has been tested and found to be electrically safe.

For example, a second-hand dealer can provide written advice on a receipt that indicates whether an electric toaster has been tested to be electrically safe.

Further, if the item is of a type of a prescribed class of electrical equipment the item must have a Queensland approval or an external approval and be marked with a regulatory compliance mark.

The maximum penalty for contravening subclause (2) and (3) is 40 penalty units.

Clause 123 provides that a person who offers for sale to another person an item of second-hand electrical equipment must give the purchaser information on whether the item has been tested and found to be electrically safe. This can be a one-off sale.

For example, a second-hand dealer can provide a notice for an electric toaster offered for sale that the toaster has not been tested to be electrically safe.

This does not apply if the purchaser conducts a business or undertaking that includes dealing in, repairing or reconditioning second-hand electrical equipment.

This clause contains the requirements under s35 of the *Electricity* (*Electrical Articles*) *Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Division 11 – Labelling and inspection of electrical equipment

Clause 124 places a requirement on a person acting under the authority of a distribution entity to attach a label to an item of portable electrical equipment that has a serious defect. Further, it places a requirement on a person not to remove the label until the item is repaired by a licensed electrical worker or at an industrial workplace where the primary activity is making, assembling, changing or adapting electrical equipment.

This clause continues the requirements under s165 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) and (3) is 40 penalty units.

Division 12 – Hire of Electrical equipment

Clause 125 provides that this division prescribes a way of discharging the electrical safety obligation of an employer or self-employed person to ensure that their business or undertaking is conducted in a way that is electrically safe.

Clause 126 provides that an employer or self-employed person must not hire out to another person an item of electrical equipment unless it has been inspected, tested and tagged by a competent person once every 6 months or before each hiring.

This clause continues the requirements under s166 of the *Workplace Health* and Safety Regulation 1997. The maximum penalty for contravening subclauses (1), (3) and (4) is 40 penalty units. The maximum penalty for contravening subclause (2) is 20 penalty units.

Part 7 – Works of an electricity entity

Division 1 – Compliance with part

Clause 127 provides that to the extent this part applies or is capable of applying to an electricity entity, it prescribes a way of discharging the electrical safety obligation of the entity to ensure its works are electrically safe and are operated in a way that is electrically safe.

Clause 128 provides that a person who designs, builds, maintains or operates works of an electricity entity must ensure that the requirements of this part are complied with. The maximum penalty for a contravention of this clause is 40 penalty units.

Division 2 – Earthing and protection

Clause 129 requires works of an electricity entity to incorporate an earthing and protection system, to a recognised electricity supply industry standard that ensures certain requirements are met.

For example, an electricity entity designs and maintains an earthing system that conforms to an industry standard to ensure the reliable operation of circuit protection fuses.

Clause 130 requires that each distinct high voltage system forming works of an electricity entity must be connected to earth by direct connection or resistance or reactance. The clause also requires fuses or circuit breakers operate during fault conditions. This continues the requirements under s88 of the *Electricity Regulation 1994*.

Clause 131 requires that the works of an electricity entity meet certain performance and other requirements. These requirements are aimed at ensuring the electrical safety for the public and workers on the works.

Clause 132 requires that a stay wire attached to a pole or structure supporting an overhead electric line not forming part of an earthing system for an electricity entities works is insulated. This clause continues the requirements under s 92 of the *Electricity Regulation 1994*.

Clause 133 requires earthling conductors installed on the outside of a pole or structure supporting an overhead electric line forming part of an electricity entity's works must be, from ground to a height of at least 2.4 m insulated or suitably covered by a non-conductive material and protected

from mechanical damage. This clause continues the requirements under s 93 of the *Electricity Regulation 1994*.

Division 3 – Substations

Clause 134 requires that a substation forming part of an electricity entity meets certain requirements. These requirements are aimed at ensuring the electrical safety for the public and workers in relation to the substation.

Division 4 – Electric lines and control cables

Clause 135 provides how distances are measured in this division.

Clause 136 provides requirements for electric lines and cables. This clause contains the requirements under s100 of the *Electricity Regulation 1994*.

Clause 137 requires that exposed conductive parts and separation of conductors on the same circuit for overhead electric lines forming part of the works of an electricity entity do not come within specified arching distances. This clause continues the requirements under s101 of the *Electricity Regulation 1994*.

Clause 138 provides the requirements for overhead circuits of electric lines forming part of the works of 1 or more electricity entities that are adjacent, or cross, and are on more than one structure. This clause continues the requirements under s102 of the *Electricity Regulation 1994*.

Clause 139 provides the requirements for distances from conductors of overhead electric lines to ground. This clause continues the requirements under s103 and s105 of the *Electricity Regulation 1994*.

Clause 140 provides the requirements for distances from conductors of overhead electric lines to a structure. This clause continues the requirements under s104 and s105 of the *Electricity Regulation 1994*.

Clause 141 provides the requirements for a person who proposes to perform work involving the construction of a building or structure or of a change to a building or structure, or the performance of other work in relation to a building or structure, and the work is likely to involve a building or structure coming within the clearance requirements under this division for an overhead or underground electric line. This clause continues the requirements under s108 of the *Electricity Regulation 1994*.

For example, a person building an advertising sign near a distribution entity's power line would need to comply with this clause.

Clause 142 provides requirements for clearance of an overhead stay wire or control cable crossing the carriage way of a road. This clause continues the requirements under s109 of the *Electricity Regulation 1994*.

Clause 143 provides requirements for an electricity entity and consumer in relation to the connection of a consumer's premises to a supply of electricity. This clause contains the safety requirements under s110 of the *Electricity Regulation 1994*.

Division 5 – Termination requirements for low voltage overhead service lines

Clause 144 provides the termination requirements for low voltage overhead service lines. This clause continues the requirements under s111 of the *Electricity Regulation 1994*.

Division 6 – Service lines generally

Clause 145 provides the requirements for fuses and circuit-breakers for active conductors of low voltage service lines. This clause continues the requirements under s113 of the *Electricity Regulation 1994*.

Clause 146 provides the requirements for service lines of consumer's premises when supply of electricity has been disconnected and the electricity entity has taken away its meters, control apparatus or other electrical equipment from the premises. This clause continues the requirements under s114 of the *Electricity Regulation 1994*.

Division 7 – Maintenance of works

Clause 147 provides requirements on an electricity entity for maintaining the integrity insulation for electric lines, including clamps and apparatus at the point where consumer mains are connected to a line and lines adjacent to roofs or structures. This clause continues the requirements under s116 of the *Electricity Regulation 1994*.

Clause 148 provides requirements on an electricity entity for trimming of trees near overhead electric lines. This clause continues the requirements under s117 of the *Electricity Regulation 1994*.

Part 8 – Electricity Supply

Division 1 – Connection to source of electricity

Clause 149 provides that a person must not connect an electrical installation to a source of electricity if the installation has a serious defect.

For example, a licensed electrical worker performing work for a licensed electrical contractor must not connect an electric stove forming part of an electrical installation that has a serious defect to supply.

This does not apply to a distribution entity unless the serious defect in the electrical installation is located in a consumer main switchboard or between a consumer main switchboard and the works of the distribution entity.

For example: A licensed electrical contractor certifies to a distribution entity that an electrical installation in a domestic premises is ready for connection to the distribution entity's supply. An employee of the distribution entity confirms that the consumer main switchboard and between the consumer main switchboard and the works of the distribution entity does not have a serious defect and connects the installation to supply. There is a bare connection in a wall of the premises that is likely to cause shock or fire. This should have been identified and rectified by the electrical contractor prior to certifying the electrical installation. A person receives an electric shock. In this instance subclause (2) would apply to the distribution entity and the employee acting on its behalf and subclause (1) would apply to the licensed electrical contractor.

This clause continues the requirements under s143 of current *Regulation*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 150 provides that a person must not connect an electrical installation to a source of electricity unless it has been tested in accordance with this clause. This clause continues the requirements under s144 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 151 provides that an electrical installation must not be initially connected to a source of electricity supplied by a distribution entity except in accordance with the requirements of clause. This clause continues the

requirements under s145 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 152 provides that an electrical installation must not be reconnected to a source of electricity supplied by a distribution entity unless done in accordance with this clause. This does not apply to reconnection in the ordinary course of disconnection and reconnection in the performance of electrical work.

For example, this clause would not apply to an electrical circuit supplying a detached garage that was disconnected and reconnected by an electrical contractor as part of electrical installation work.

This clause continues the requirements under s146 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 153 provides that a high voltage electrical installation or an electrical installation located in a hazardous area must not be connected or reconnected to a supply of electricity unless it is performed in accordance with this clause.

This involves the work being inspected by an accredited auditor to ensure the electrical installation is electrically safe and complies with the wiring rules and any standards applying under this Regulation.

These requirements are in addition to other requirements under this division. The maximum penalty for contravening sub-clause (1) and (2) is 40 penalty units.

Clause 154 provides that a licensed electrical contractor must not connect an electrical installation on which electrical work has been performed unless they are satisfied that this regulation has been complied with and that if required an a certificate has been given by an accredited auditor. The maximum penalty for contravening this clause is 40 penalty units.

Clause 155 provides the requirements for a licensed electrical contractor or licensed electrical worker holding an electrical mechanics licence performing work on consumer terminals, main switchboard or mains. This clause continues the requirements under s152 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (3) is 40 penalty units.

Division 2 – Private generating plant

Clause 156 provides requirements for a person with private generating plant installed at their premises that is intended to supply electricity to the person's electrical installation or to the person's installation and the installation of another person during an interruption of the supply of electricity from a distribution entity.

This clause continues the requirements under s162 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) and (3) is 40 penalty units.

Clause 157 provides requirements for a person with private generating plant installed at their premises that is intended to interconnect with the works of an electricity entity. This clause continues the requirements under s163 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Division 3 – Testing

Clause 158 requires a licensed electrical contractor to give a certificate to the distribution entity where the contractor is required under this part to test an electrical installation and part of the installation is required to be examined or tested by the distribution entity that supplies, or is to supply electricity to the installation. This clause continues the requirements under s168 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Clause 159 requires a licensed electrical contractor who connects an electrical installation on which electrical work has been performed to a source of electricity, must as soon as practicable after connection, give the person for whom the work was performed, a certificate about the testing required under this part. The contractor must keep a copy of the certificate for 5 years. This clause continues the requirements under s169 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units. The maximum penalty for contravening subclause (4) is 20 penalty units.

Clause 160 requires that a distribution carrying out examinations or tests under this part must ensure the electrical installation, to the extent of the examination or test is electrically safe. This clause continues the

requirements under s172 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause (2) is 40 penalty units.

Clause 161 requires that if a distribution entity does not connect or reconnect an electrical installation after examination or testing they must give the consumer a written report stating the reasons for not connecting or reconnecting. This clause continues the requirements under s173 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 162 requires that an employer of a person who performs an examination or test under this part must keep a record of the report of the examination or test for 5 years. This clause continues the requirements under s182 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 20 penalty units.

Division 4 – Requests and advice to distribution entities

Clause 163 provides where electrical work must be examined or tested by a distribution entity before connection or reconnection to supply under this part, the person who performed the electrical work must ask the distribution entity to examine or test the work and certify that the work is complete and ready for connection. This clause continues the requirements under s183 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Clause 164 provides if because of the performance of electrical work on an electrical installation, there is a need to install or change metering, control apparatus or other ancillary equipment forming part of the works of a distribution entity, the person must advise the distribution entity and certify the work is complete. This clause continues the requirements under s168 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Part 9 – Safety Management Systems

Division 1 – Prescribed electricity entities

Clause 165 prescribes for part 5 of the Act the electricity entities that will be required to implement a safety management system two years after this clause commences. The entities are prescribed in Schedule 6.

Division 2 – Requirements for safety management systems

Clause 166 prescribes the requirements for a safety management system.

The safety management system must contain details of the systems safety objectives, systems and procedures for meeting these objectives, performance criteria and ways of maintaining adherence to the performance criteria.

Further the system must provide for:

- annual auditing by an accredited auditor at the expense of the entity;
- submission of an annual audit plan to the chief executive; and
- a certificate of the annual audit from an accredited auditor.
- making modifications to the system or the audit plan and being audited in accordance with the reasonable requirements of the chief executive.

The prescribed electricity entity must initially give the chief executive a copy of the safety management system and a certificate from an accredited auditor verifying the system has been assessed and validated to meet its requirements.

The prescribed electricity entity must give the chief executive any information the chief executive reasonably requires about the system or annual audit plan to ensure that the design, construction, operation and maintenance of the entities works complies with the requirements of the Act.

Part 10 – Accredited Auditors

Clause 167 provides how an application is made for appointment or renewal of appointment as an accredited auditor under the Act. This includes making the application in an approved form, any fixed fees and information necessary to support the information.

Clause 168 provides that if the chief executive does not approve an application under this part or the application is withdrawn, the appointment administration part of any fixed fee paid with the application must be refunded. The appointment administration part is the part of the fee decided by the chief executive as the amount fairly representing the cost of administering an appointment as an accredited auditor. It is not the part representing the cost of administering the application.
Part 11 – Cathodic Protection Systems

Division 1 – Preliminary

Clause 170 provides the definitions for Part 11.

Clause 171 provides that in this part an electrical value (for example voltage) is the value for direct current. This clause continues the requirements under s186 of the *Electricity Regulation 1994*.

Clause 172 provides that this part does not apply to certain cathodic protection systems. This clause continues the requirements under s187 of the *Electricity Regulation 1994*.

Division 2 – Installation and design

Clause 173 provides the requirements that must be met before a cathodic protection system can be installed. This clause continues the requirements under s188 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 174 provides that a cathodic protection system must be designed and installed in accordance with the requirements of the cathodic protection standard. The maximum penalty for contravening this clause is 40 penalty units.

Division 3 – Operating requirements

Clause 175 provides the requirements that must be met to operate a cathodic protection system. This clause continues the requirements under s189 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Division 4 – Testing Requirements

Clause 176 provides the testing requirements for the owner of a registrable and not registrable cathodic protection system. This clause continues the requirements under s190 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) and (2) is 40 penalty units.

Clause 177 provides further testing requirements for registered systems. This clause continues the requirements under s192 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclauses (1), (2) and (3) is 40 penalty units.

Clause 178 provides the requirements for interference tests on all systems. This clause continues the requirements under s193 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 179 provides that the chief executive can require the owner of a cathodic protection system to perform tests on foreign structures not previously tested by the owner. This clause continues the requirements under s194 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 180 requires the owner of a cathodic protection system to keep tests performed under this section for 10 years and to provide copies to the chief executive within 14 days. This clause continues the requirements under s195 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) and (2) is 20 penalty units.

Clause 181 provides that the chief executive may arrange for the testing of a cathodic protection system to decide whether it complies with this part and the owner must provide access to and facilities for the testing of the system. This clause continues the requirements under s196 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (2) is 40 penalty units.

Division 5 – System Requirements

Clause 182 provides the electrical limits for a cathodic protection system. This clause continues the requirements under s197 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 183 provides the maximum potential changes for a cathodic protection system in relation to foreign structures. This clause continues the requirements under s197 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 184 provides that the tolerances for measuring instruments used to test the cathodic protection system are in accordance with the cathodic protection standard. The maximum penalty for contravening this clause is 40 penalty units.

Clause 185 provides that the anode groundbed that is on land or premises not owned by the owner of the cathodic protection system is clearly identified with the name of the owner. This clause continues the requirements under s200 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 20 penalty units.

Division 6 – Registration of registrable systems

Clause 186 provides that the chief executive must keep a register of registered systems.

Clause 187 provides the requirements for applying for registration of a cathodic protection system. This clause continues the requirements under s202 of the *Electricity Regulation 1994*.

Clause 188 provides that the chief executive must register a cathodic protection system that is in a registrable system by entering it in the register from clause 185.

Clause 189 provides that a registration is for 5 years unless it is cancelled earlier. This clause continues the requirements under s204 of the *Electricity Regulation 1994*.

Clause 190 provides that the owner of a registered system must give written notice of a change of name or address within 30 days of the change. This clause continues the requirements under s206 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 40 penalty units.

Clause 191 provides when the chief executive may cancel the registration of a registered system. This clause continues the requirements under s207 of the *Electricity Regulation 1994*.

Clause 192 provides that the owner of a registered system must give the chief executive written notice if the system is taken away or made

permanently inoperable within 30 days. This clause continues the requirements under s208 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 20 penalty units.

Clause 193 provides that the owner of a registered system must notify the chief executive if the system or method of operation is changed immediately and give written within 14 days. The owner must comply with any actions required by the chief executive under this part. This clause continues the requirements under s 209 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclause (1) is 20 penalty units and (3) is 40 penalty units.

Part 12 – Incident Notification and Reporting

Clause 194 provides the definitions for this Part.

Clause 195 provides the meaning of "distribution entity" for a serious electrical incident or dangerous electrical event.

Clause 196 provides the notification requirements for an employer or self-employed person for a serious electrical incident and dangerous electrical event. This is providing written notice in 24 hours after the employer or self-employed person becomes aware of the incident or event or immediately if a person has been killed in a serious electrical incident. The maximum penalty for contravening subclauses (2) and (3) is 40 penalty units.

Clause 197 provides that an employer or self-employed person who must notify the chief executive under this part must keep a record of the serious electrical incident or dangerous electrical event. This must be made within 3 days of the employer or self-employed person becoming aware of the happening of the incident or event, or where the employer or self-employed person is incapacitated, as soon as practicable after the employer or self-employed person is no longer incapacitated. This record has to be kept for 3 years. The maximum penalty for contravening subclause (2) is 20 penalty units.

Clause 198 provides the notification requirements for a distribution entity advised of the happening of a serious electrical event where the distribution entity is the distribution entity for the incident or the event. This includes providing written notice in 24 hours after the entity becomes aware of the incident or event or immediately if a person has been killed in a serious

electrical incident. The entity is not required to notify the chief executive if the entity knows that the incident or event has already been reported.

For example, an entity would not need to report an incident to the chief executive where they know that an employer has reported in accordance with this Part.

The maximum penalty for contravening subclause (2) and (3) is 40 penalty units.

Clause 199 provides the requirements for a distribution entity advised that a person has received an electric shock at an electrical installation supplied by the entity. This includes taking action necessary in the interests of electrical safety of persons and making an incident record which must be kept for 5 years.

For example, an electricity entity may attend and take action to ensure no other person is likely to receive an electric shock at a place where a person has received an electric shock.

The maximum penalty for contravening subsection (2) is 40 penalty units.

Clause 200 requires a distribution entity to provide a report every 3 months to the chief executive on their incident records. The maximum penalty for contravening this clause is 20 penalty units.

Clause 201 provides that the scene of a serious electrical incident or dangerous electrical event must not be interfered with without the permission of an inspector or if an inspector is not available, a police officer. This clause will not be contravened if the movement or interference is necessary to safe life, relieve suffering, prevent injury to a person or prevent property damage.

For example, a electrical contractor using a safe method can move a piece of faulty electrical equipment to rescue a person from a situation where they are receiving an electric shock.

Clause 202 provides the requirements on a distribution entity if a person advises the entity of a reasonable concern about the electrical safety of the equipment. The distribution entity must take action necessary in the interests of the electrical safety of persons.

For example, a consumer who concerned about their electrical installation because a circuit breaker is operating for an unknown reason asks a distribution entity for advice. The entity must advise the consumer about actions to take to address electrical risk.

The maximum penalty for contravening subclause (2) is 40 penalty units.

Part 13 – Miscellaneous

Division 1 – Electrical Safety Contributions

Clause 203 provides that the purpose of this division is to prescribe for Part 14, division 1 of the Act, things that are necessary or convenient for establishing and operating arrangements for the payment of electrical safety contributions.

Clause 204 provides the definitions for this division.

Clause 205 provides how the electrical safety contribution payable by each distribution entity for the current financial year is to be calculated. This is based on a premises figure (or customer numbers).

Clause 206 provides that the distribution entity pay the electrical safety contribution in equal instalments at or near the beginning of each quarter for the financial year.

Division 2 – Mines and Petroleum Plants

Clause 207 provides the provisions of the regulation that have application at a mine or petroleum plant under s6(2) of the Act. This includes requirements for electrical work licences, working on electric motors, approvals of electrical equipment, cathodic protection systems and incident reporting and notification requirements.

Division 3 – Other matters

Clause 208 provides that a person must not climb or attach a ladder to or in contact with a pole or other structure that is part of an electricity entity's works unless the person is authorised by the electricity entity. This does not apply to an inspector or a licensed electrical contractor or worker performing electrical installation work that involves removing or replacing a fuse wedge from a service fuse or switching off an on a circuit-breaker installed as a service line disconnector. This clause contains the requirements under s234 of the *Electricity Regulation 1994*. The maximum penalty for contravening this clause is 40 penalty units.

Clause 209 provides the obligations of an employer about supervising training persons.

For example, an appropriately qualified person should directly supervise an apprentice that is carrying out work associated with electrical equipment for the first time. Once the apprentice has been assessed competent to carry out the work in a way that is safe and compliant with the Act, the degree of supervision could be reduced.

This clause continues the requirements under s30 of the *Electricity Regulation 1994*. The maximum penalty for contravening subclauses (1) and (2) is 40 penalty units.

Clause 210 provides that the chief executive must keep a register under this regulation, for example for electric licences, approvals of electrical equipment and cathodic protection systems, open for inspection on payment of any fixed fee. A person may for any fixed fee obtain a copy of an entry in a register.

Clause 211 provides the information which is to be provided by a retail entity to the chief executive under s164 of the Act. This information is used to aid in the enforcement of the legislation by inspectors.

Part 14 – Transitional Provisions

Division 1 – Interpretation

Clause 212 provides the definitions for Part 14.

Division 2 – Electrical Licences

Clause 213 identifies equivalent licences for previous licences for the Act, section 211, definition "equivalent licence". This provides for the transition of current licences issued under *Electricity Act 1994* to be transferred into the new legislative regime.

Clause 214 provides that if a person immediately before the commencement of this section complied with the requirements for an electrical jointer's licence under the *Electricity Act 1994* they comply with the eligibility requirements for an electrical jointer licence under these

regulations. This allows persons who have gained their qualifications other than by an apprenticeship to continue being eligible.

Clause 215 provides that if a person immediately before the commencement of this section complied with the requirements for an electrical linesperson's licence under the *Electricity Act 1994* they comply with the eligibility requirements for an electrical linesperson licence under these regulations. This allows persons who have gained their qualifications other than by an apprenticeship to continue being eligible.

Division 3 – Matters in place before commencement

Clause 216 provides that if a person had registered a cathodic protection system immediately before the commencement of this section, they acquire registration under this regulation for the remainder of their registration.

Clause 217 provides that if a person had an approved of a prescribed electrical article under the *Electricity (Electrical Articles) Regulation 1994* in force, they acquire equivalent approval of the type of electrical equipment of a prescribed class of electrical equipment under this regulation.

Clause 218 provides that overhead electric lines built before 1 January 1995 that continue to comply with the requirements of the *Electricity Regulation 1989* comply with the clearance requirements under part 7, division 4 for overhead electric lines until they are rebuilt or replaced. This clause continues the requirements under s107 of the *Electricity Regulation 1994*.

Clause 219 provides that low voltage overhead service lines built before 1 January 1995 that continue to comply with the requirements of the *Electricity Regulation 1989* comply with the clearance requirements under part 7, division 5 for overhead service lines until they are rebuilt or replaced. This clause continues the requirements under s107 of the *Electricity Regulation 1994*

Clause 220 provides that an overhead electric line built before the commencement of this section that continues to comply with the *Electricity Regulation 1994* complies with the requirements under Part 7, division 4 for overhead electric lines until they are rebuilt or replaced.

Division 4 – Transitional provisions for rural industry

Clause 221 provides the requirements that will not apply to the rural industry until 1 March 2002. The rural industry will retain its existing exemption for the provisions contained within Part 16 of the *Workplace Health and Safety Regulation 1994* which have been transferred to the Regulation.

Clause 222 provides the requirements that will not apply to the rural industry until 29 February 2004. This will allow the rural industry to existing exemption for connecting specified electrical equipment to type 1 and 2 safety switches contained within Part 16 of the *Workplace Health and Safety Regulation 1994* which have been transferred to the Regulation for 1 year.

Clause 223 provides the requirements that will not apply to the rural industry until 28 February 2006. This will allow the rural industry will retain its existing exemption for specified electrical equipment, specifically testing and tagging, contained within Part 16 of the *Workplace Health and Safety Regulation 1994* which have been transferred to the Regulation for 3 years.

Division 5 – Workplace requirements for class 1 work until 28 February 2003

Clause 224 provides that the purpose of this division is to prescribe a way of discharging the electrical safety obligation of an employer or self-employed person to ensure that the person's business or undertaking is conducted in a way that is electrically safe.

Clause 225 provides that this division applies to the performance of class 1 work at a workplace until the end of 28 February 2003. Until that date, Part 5, division 5, subdivision 3 does not apply.

Clause 226 provisions that the definitions in part 5, division 5 apply to this provision.

Clause 227 provides that the use of double adaptors and piggyback plugs is prohibited. This clause continues the requirements under s152 of the *Workplace Health and Safety Regulation 1997*.

Clause 228 provides requirements for testing and tagging and the use of safety switches for specified electrical equipment. This clause continues

the requirements under s153 of the Workplace Health and Safety Regulation 1997.

Clause 229 provides the requirements for testing portable safety switches. This clause continues the requirements under s154 of the *Workplace Health and Safety Regulation 1997*.

Clause 230 provides the requirements for construction wiring for a construction workplace. This clause continues the requirements under s155 of the *Workplace Health and Safety Regulation 1997*.

Clause 231 provides that this division expires at the end of 28 February 2003. From this date Part 5, division 5, part 3 applies.

Division 6 – Workplace requirements for class 2 work until 28 February 2003

Clause 232 provides that this division applies to the performance of class 2 work at a workplace until the end of 28 February 2003.

Clause 233 provides that the requirement that specified electrical equipment be connected to a type 1 safety switch or a type 2 safety switch, the equipment need not be connected to a type 1 safety switch or type 2 safety switch if its electricity supply is provided by an unearthed output from a single phase portable generator.

Clause 234 provides that this division expires at the end of 28 February 2003. This clause expires on 28 February 2003, as the requirement will be encompassed by requirements under AS/NZS 3012 (Electrical installations – Construction and demolition sites).

Part 15 – Amendments of other subordinate legislation

Clause 235 amends the subordinate legislation mentioned in Schedule 7.

Schedule 1 – External Licences and Electrical work licence equivalents

Schedule1 contains the external licences and the equivalent electric work licences for clause 32.

Schedule 2 – Exclusion Zones for electrical parts

Schedule 2 contains the exclusion zones for electrical parts for untrained persons, authorised persons, instructed persons, mobile plant and vehicles for clause 61.

Schedule 3 – Prescribed classes of electrical equipment and relevant standards

Schedule 3 contains the prescribed electrical equipment and relevant standards for clause 96 and 97.

Schedule 4 – Clearance of overhead electric lines (other than low voltage service lines)

Schedule 4 contains the clearance of overhead electric liens (other than low voltage service liens) for clause 139 and 140.

Schedule 5 – Clearance of low voltage overhead service lines

Schedule 5 contains the clearance distances for low voltage overhead service lines for clause 139 and 140.

Schedule 6 – Prescribed electricity entities

Schedule 6 contains the prescribed electricity entities for safety management systems for clause 165.

Schedule 7 – Amendments

Schedule 7 contains consequential amendments to the following Regulations:

- Coal Mining Safety and Health Regulation 2001;
- Mining and Quarrying Safety and Health Regulation 2001;
- *Petroleum Regulation 1966;*
- Queensland Building Services Authority Regulation 1992;
- State Penalties Enforcement Regulation 2000;
- Statutory Bodies Financial Arrangements Regulation 1997; and
- Workplace Health and Safety Regulation 1997.

Schedule 8 – Dictionary

Schedule 8 contains a dictionary that provides definitions of words and terms used in the Regulation.

ENDNOTES

- 1. Laid before the Legislative Assembly on . . .
- 2. The administering agency is the Department of Industrial Relations.

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