

1992—No. 504

ELECTRICITY ACT 1945—REGULATION

(Electricity (Workers' Safety) Regulation 1992)

NEW SOUTH WALES



[Published in Gazette No. 109 of 1 September 1992]

HIS Excellency the Governor, with the advice of the Executive Council, and in pursuance of the Electricity Act 1945, has been pleased to make the Regulation set forth hereunder.

GARRY WEST,
Minister for Energy.

PART 1—PRELIMINARY

Citation

1. This Regulation may be cited as the Electricity (Workers' Safety) Regulation 1992.

Commencement

2. (1) This Regulation commences on 1 September 1992, except as otherwise provided by this clause.

(2) Clause 12 (1) (d) commences on 1st September, 1992.

(3) The provisions of clause 12 (2) and (3) commence on 1 September 1993.

Repeal

3. (1) The Overhead Line (Workers) Regulations 1964 are repealed.

(2) Any action taken under the Overhead Line (Workers) Regulations 1964 is to be regarded as having been taken under this Regulation.

Definitions

4. (1) In this Regulation:

“**access permit**” means a permit issued and in force under clause 39;

“**alive**” or “**live**” means connected to a source of electrical supply or subject to hazardous induced or capacitive voltages;

“**approved**” means approved in writing;

“**cable**” means an insulated conductor or 2 or more such conductors laid together, whether with or without fillings, reinforcements or protective coverings;

“**Corporation**” means the Energy Corporation of New South Wales constituted under the Energy Administration Act 1987;

“**de-energised**” means not connected to a source of electrical supply;

“**earthed**” means electrically connected to the general mass of the earth;

“**electrical apparatus**” means:

(a) any equipment (including an overhead line, cable, generator, machine, transformer or switchgear) associated with the supply of electricity; and

(b) any other equipment supplied at high voltage;

“**electrical station**” means any enclosed substation or switching station, whether of the indoor, outdoor or underground type;

“**employee**” means a worker in the employment of an employer (whether under a contract of employment or apprenticeship) and includes a contractor, and a person employed by a contractor, who carries out work for an employer;

“**employer**” means an electricity supply authority or the owner or lessee of any electrical apparatus on which work to which this Regulation applies is carried out;

“**exposed conductor**” means an electrical conductor, approach to which is not prevented by a barrier of rigid material or by insulation which is adequate under a relevant Australian Standard specification (published by the Standards Association of Australia) for the voltage concerned and which is in sound condition;

“**extra low voltage**” means voltage normally not exceeding 32 volts alternating current or 115 volts direct current;

“**generating station**” means a building or enclosure where electrical energy is able to be generated at high voltage or generated at low voltage and subsequently transformed to high voltage;

“**high voltage**” means a voltage normally exceeding 650 volts alternating or direct current;

“isolated” means disconnected from all possible sources of electrical energy by the opening of switches, withdrawal of circuit breakers, removal of fuses, links, connections and the like and rendered incapable of being made live unintentionally;

“low voltage” means a voltage normally exceeding 32 volts alternating current or 115 volts direct current, but not normally exceeding 650 volts alternating or direct current;

“operating work” means work involving the operation of switches, the opening or closing of links or other connections intended for ready removal, the removal or replacement of fuses, proving that electrical apparatus is de-energised and the earthing and short-circuiting of electrical apparatus;

“overhead line” means an aerial conductor together with insulators, hardware, crossarms or other associated electrical equipment erected or in the course of erection out-of-doors for the purpose of supplying electricity, but does not include any pole or support or those portions within a fence surrounding an electrical station;

“voltage” means potential difference between conductors and between conductors and earth.

(2) A reference in this Regulation to work “near” an exposed conductor is a reference to work at a distance from the conductor at which there is a reasonable possibility of:

- (a) a person’s body; or
- (b) any object which the person might be carrying or touching during the course of work other than an object that is designed for use on live conductors of the same voltage,

coming closer to the conductor than the relevant distance specified in clause 27.

Work to which Regulation applies

5. (1) This Regulation applies to the following work:

- (a) work carried out on high voltage electrical apparatus or on or near high voltage exposed conductors;
- (b) work carried out on low voltage electrical apparatus, or on or near low voltage exposed conductors, owned or leased by an electricity supply authority for supply of electricity to the public;
- (c) work carried out on any electrical apparatus, or on or near any exposed conductors, in electrical stations containing high voltage electrical apparatus or in generating stations.

- (2) This Regulation does not apply to the following work:
- (a) work carried out on electrical apparatus that cannot be energised by operating work because of the absence of electrical connections to any possible source of electricity supply, where no person, and no material or equipment not insulated for the voltage concerned, can come within the relevant distance specified in clause 27 of any exposed conductor which is live or can be energised by operating work;
 - (b) the construction, maintenance and operation of electrical apparatus operated at extra low voltage;
 - (c) the construction, maintenance and operation of electrical apparatus to which the Coal Mines Regulation Act 1982, the Mines Inspection Act 1901 or any rules or regulations made under those Acts apply.

Persons to whom Regulation applies

6. This Regulation imposes obligations on the following persons:
- (a) employees who carry out work to which this Regulation applies;
 - (b) employers of employees who carry out such work;
 - (c) owners and lessees of electrical apparatus on which such work is carried out.

Special exemptions

7. (1) This Regulation does not apply to any person engaged in work that the Corporation, by order published in the Gazette, has exempted from the application of this Regulation.

(2) The Corporation may exempt from the application of this Regulation:

- (a) any work that utilises a special experimental technique; or
- (b) any work that is undertaken for the purposes of research; or
- (c) any work that is undertaken for any other purpose approved by the Corporation.

(3) An exemption may be given subject to specified conditions relating to the work. If given subject to conditions, the exemption ceases to have effect in relation to an employer or employee who contravenes the conditions.

Direction to rectify unsafe or hazardous situation

8. (1) The Corporation may direct an employer to rectify, in accordance with the direction in writing of the Corporation, any situation which, in the opinion of the Corporation, results from a contravention of this Regulation.

(2) An employer who fails to comply with a direction given to the employer under this clause is guilty of an offence.

Maximum penalty (subclause (2)): \$2,000.

Authorised persons

9. (1) An employee is authorised for the purposes of a particular provision of this Regulation if the employee has been authorised in writing by his or her employer for the purposes of that provision.

(2) An employer must not authorise an employee for the purposes of a particular provision of this Regulation unless satisfied that the employee has been trained to carry out the type of work to which the authorisation relates and is competent to perform that work.

Maximum penalty (subclause (2)): \$2,000.

Crown bound

10. This Regulation binds the Crown.

PART 2—QUALIFICATIONS AND TRAINING**Application**

11. This Part applies to all work to which this Regulation applies.

General requirements for carrying out of work

12. (1) An employee must not carry out work to which this Regulation applies, and an employer must not permit or require an employee to carry out any such work, unless:

- (a) the employee has received training which is appropriate for the type of work concerned; and
- (b) the employee is physically fit to safely perform the work required to be undertaken; and
- (c) the employee has, during the previous 12 months, received instruction appropriate for the type of work concerned in procedures, approved by the employer, for the following:

- resuscitation;
 - releasing a person from live electrical apparatus;
 - rescuing a person from a pole, structure or elevating work platform;
 - rescuing a person from a confined space; and
- (d) the employee has displayed during the previous 12 months, to the satisfaction of the employer, an adequate knowledge of the provisions of this Regulation that are relevant to the type of work concerned.
- (2) An employer (other than an electricity supply authority) must not authorise an employee to issue access permits unless the employee:
- (a) has produced to the employer documentary evidence of having successfully completed a course in safe working practices covering the matters addressed in this Regulation conducted by one of the bodies specified in Part 1 of Schedule 1; or
 - (b) has produced to the employer documentary evidence that the employee has satisfied one of the bodies specified in Part 1 of Schedule 1 that equivalent experience or training in safe working practices covering the matters addressed in this Regulation has been gained by the employee.
- (3) An employee who is authorised to issue access permits by an employer who is not an electricity supply authority must not issue an access permit to another employee unless the other employee has complied with subclause (2) (a) or (b).

Maximum penalty: \$2,000.

Appropriate qualifications and training

13. (1) A person is not to be considered to have received appropriate training for cable jointing work for the purposes of clause 12 unless the person:

- (a) has obtained a certificate from one of the bodies specified in Part 2 of Schedule 1 stating that the employee is competent to undertake the specific cable jointing work concerned; or
- (b) has received specific training to the satisfaction of the employer to safely carry out work on the type of apparatus concerned.

(2) A person is not to be considered to have received appropriate training for work on an overhead line for the purposes of clause 12 unless the person:

- (a) has obtained qualifications referred to in Regulation 2 (2) or 8 (1) of the Overhead Line (Workers) Regulations 1964 (as in force immediately before their repeal); or

(b) has obtained a certificate from one of the bodies specified in Part 3 or 4 of Schedule 1 showing that the employee has satisfactorily completed the course of training in overhead line work conducted by that body.

(3) A person is not to be considered to have received appropriate training for work on a live high voltage overhead line (other than operating work or work on a live traction overhead wiring system) for the purposes of clause 12 unless the person:

(a) has obtained qualifications referred to in Regulation 8A of the Overhead Line (Workers) Regulations 1964 (as in force immediately before their repeal); or

(b) has obtained a certificate from one of the bodies specified in Part 5 of Schedule 1 showing that the employee has satisfactorily completed the course of training in live high voltage overhead line work conducted by that body.

(4) A person is not to be considered to have received appropriate training for work on a live 1 500 volt (nominal) direct current traction overhead wiring system for the purposes of clause 12 unless the person has obtained a certificate from one of the bodies specified in Part 6 of Schedule 1 showing that the employee has satisfactorily completed the course of training in live 1500 volt (nominal) direct current traction overhead wiring work conducted by that body.

(5) A person is not to be considered to have received appropriate training for pole inspection and maintenance for the purposes of clause 12 unless the person has obtained a certificate from one of the bodies specified in Part 7 of Schedule 1 showing that the employee has satisfactorily completed the course of training in pole inspection and maintenance conducted by that body.

(6) Subclause (5) does not apply to pole inspection for the purpose of determining whether or not a pole is safe to climb.

Certain alternative qualifications and training acceptable

14. (1) An employee may be considered to be appropriately qualified to carry out work referred to in clause 13 even though not qualified in accordance with that clause if the employee holds a written statement from a body specified in the relevant Part of Schedule 1 stating that the employee has alternative qualifications and training to perform the work competently.

(2) A body must not give a statement referred to in subclause (1) to a person unless:

- (a) the person's alternative qualifications and training are, in the opinion of that body, equivalent to the qualifications in the relevant provisions of clause 13; and
- (b) the statement indicates the alternative qualifications and training and the relevant provisions of clause 13 and is signed and dated by the person and a person authorised to do so by that body.

Maximum penalty (subclause (2)): \$2,000.

Requirements for carrying out specified work

15. (1) Nothing in clause 12 or 13 prevents an employee not qualified in accordance with those clauses from carrying out specified work if

- (a) the work is of a category that, in the opinion of the employer, does not require full training; and
- (b) specific training which is, in the opinion of the employer, appropriate for the work has been completed by the employee to the satisfaction of the employer; and
- (c) the employee and employer each sign and retain a copy of a written statement, which applies generally or to a particular case, and which specifies the work that can be performed by the employee and the training (if any) provided by the employer to enable the work to be performed safely.

(2) An employee to whom this clause applies must not carry out work which is outside the limits of work specified in the statement.

Maximum penalty: \$2,000.

(3) An employer must not permit or require an employee to carry out work which is outside the limits of work specified in the statement.

Maximum penalty: \$2,000.

(4) This clause does not apply to work referred to in clause 13 (3) or (4).

Employees in training

16. Nothing in clause 12 or 13 prevents an employee designated by his or her employer as undergoing training from carrying out work if the work is carried out under the continuous and close supervision of a person qualified in accordance with those clauses to carry out that work.

Training standards

17. (1) Each body specified in Schedule 1 (Part 4 excepted) must have a written agreement with the Corporation which is to be reviewed from

time to time and which specifies, where appropriate, course syllabus, training facilities and the criteria for issue of certificates.

(2) The Corporation is to undertake a review of the bodies in Part 4 of Schedule 1 at regular intervals to ensure the continued appropriateness of the course syllabus, training facilities and the criteria for issue of certificates.

Certificate of service

18. An employer must, on request, provide an employee who is or has been employed to carry out work to which this Regulation applies with a certificate of service stating the duties performed and training received during the period of employment.

Maximum penalty: \$2,000.

Issue of certificates

19. (1) Certificates issued by a body specified in Schedule 1 (Part 4 excepted) in accordance with clause 12 or 13 must be in a form supplied to the issuing body by the Corporation.

(2) Each such body is to maintain a register of certificates received and issued which must be made available for inspection on request by the Corporation.

PART 3—GENERAL PROVISIONS

Application

20. This Part applies to all work to which this Regulation applies.

Basic safety principles

21. (1) An employee engaging or preparing to engage in work to which this Regulation applies must regard all high voltage exposed conductors as alive until they are isolated, proved to be de-energised and earthed and short-circuited, by means approved by the employer.

(2) An employee engaging or preparing to engage in work to which this Regulation applies must regard all low voltage exposed conductors as alive until they are isolated and proved to be de-energised, by means approved by the employer.

Remedying breaches of Regulation

22. An employee engaged in work on electrical apparatus and the employer must, if any contravention of this Regulation is observed in connection with the work, immediately take steps to ensure that the contravention is rectified.

Maximum penalty: \$2,000.

Reporting of dangerous conditions and practices

23. (1) An employee engaged in work on electrical apparatus and the employer must cause to be guarded until made safe any condition in connection with the work which is found to be immediately dangerous.

(2) Any employee who observes any dangerous conditions or practices in connection with the work must immediately report them to the employer who must record the report and take appropriate remedial action.

Maximum penalty: \$2,000.

First-aid

24. (1) An employer must keep conspicuously displayed, in every electrical station building, depot and camp used by the employer's employees, instructions for the treatment of persons who have received injury from electric shock.

(2) An employer must maintain those instructions in a legible condition.

(3) An employer must provide and maintain in a serviceable condition first-aid kits containing articles sufficient and adequate for the treatment of minor injuries.

(4) An employer must so place those first-aid kits that they are immediately available for use in the event of injury to any employee engaged in work on electrical apparatus.

Maximum penalty: \$2,000.

Emergency assistance

25. Nothing in this Regulation prevents a person from taking such action as may be necessary and appropriate in an emergency involving danger to human life

Clothing and materials

26. (1) An employee must regard all clothing and materials, including liquids and gases, as capable of conducting electricity unless the employee has definite knowledge to the contrary.

(2) An employee must wear clothing giving appropriate protection to the head, body, arms, legs and feet when working on or near live exposed conductors.

Maximum penalty (subclause (2)): \$2,000.

Minimum safe working distances

27. (1) Except as provided by clauses 35 and 52 and Part 9, an employee must not allow any part of his or her body to come within the relevant distance specified in the Table to this clause of any part of any live exposed conductor.

Maximum penalty: \$2,000.

(2) Except as provided by clauses 35 and 52 and Part 9, an employee must not take any material or equipment that is not insulated for the voltage concerned to come within the relevant distance specified in the Table to this clause of any part of any live exposed conductor.

Maximum penalty: \$2,000.

(3) An employee may work within the relevant distances specified in the Table to this clause if:

- (a) the work can be performed in a safe manner; and
- (b) the employee has been instructed, in writing by the employer, either generally or in the particular case, in respect of the work to be carried out and the precautions to be observed; and
- (c) the employee is closely attended by another employee qualified in accordance with clause 12 (1) (c) except, in the case of operating work or work near live exposed low voltage conductors, in circumstances approved by the employer.

(4) This clause does not apply to an earthed neutral conductor with a nominal voltage not exceeding 650 volts.

TABLE

Nominal Voltage (volts)	Minimum Safe Working Distance (millimetres)
Up to 650	500
above 650 but not exceeding 11000	700
above 11 000 but not exceeding 66 000	1 000
above 66 000 but not exceeding 132 000.....	1 500
above 132 000 but not exceeding 220 000.....	2 500
above 220 000 but not exceeding 330 000.....	3 000
above 330 000.....	4 000

Labelling for identification

28. (1) An employer must ensure that any electrical apparatus, the identity of which is not obvious, is clearly and permanently labelled.

(2) When alterations are made to electrical apparatus that alter the accuracy of labels, an employer must ensure that the labels are immediately and appropriately modified.

Maximum penalty: \$2,000.

Induced voltages and transferred earth potentials

29. An employee who is working on electrical apparatus must take precautions, where appropriate and as approved by the employer, to avoid danger from induced voltages and transferred earth potentials.

Maximum penalty: \$2,000.

Working on current transformers

30. An employee must not open circuit the secondary circuits of a current transformer while the primary circuit is alive.

Maximum penalty: \$2,000.

Testing before energisation

31. Before an employee energises any electrical apparatus which has never been commissioned, or which has been worked on, the employee must perform such tests or checks as are approved by the employer to ensure that, as far as practicable, the electrical apparatus will be energised safely.

Maximum penalty: \$2,000.

New high voltage customers

32. An electricity supply authority must, before connecting any new high voltage customer, make the prospective customer aware in writing of the existence of this Regulation and its applicability to the customer.

Maximum penalty: \$2,000.

PART 4—WORK ON OR NEAR LOW VOLTAGE EXPOSED CONDUCTORS**Application**

33. This Part applies to all work to which this Regulation applies that is carried out on or near low voltage exposed conductors.

Work on or near de-energised low voltage exposed conductors

34. (1) An employee must not work on or near de-energised low voltage exposed conductors, and an employer must not permit or require an employee to carry out such work, unless:

- (a) the conductors are isolated; and
- (b) the conductors are proved to be de-energised by a method approved by the employer; and
- (c) precautions have been taken to ensure the conductors remain de-energised; and
- (d) the conductors are clearly identified.

(2) An employee must not work on or near de-energised low voltage exposed conductors where the employer has caused the employee to be notified that hazardous induced voltages are likely to occur unless the employee, in addition to complying with subclause (1), uses live working procedures or has caused the conductors to be earthed and short-circuited by means approved by the employer.

Maximum penalty: \$2,000.

Work on or near live low voltage exposed conductors

35. An employee must not work on or near live low voltage exposed conductors, and an employer must not permit or require an employee to carry out such work, unless:

- (a) the employee is trained in the safe performance of such work; and
- (b) the conductors have been identified as low voltage; and
- (c) suitable precautions have been taken by screening or other means to avoid danger from inadvertent contact with other live conductors or earth; and
- (d) the employee is attended by another employee qualified in accordance with clause 12 (1) (c) except in circumstances approved by the employer.

Maximum penalty: \$2,000.

Energising low voltage exposed conductors

36. An employee must not energise low voltage exposed conductors, and an employer must not permit or require an employee to carry out such energisation, unless:

- (a) the live working procedures specified in clause 35 are adopted; or
- (b) precautions have been taken to ensure that all persons are clear of the conductors and that any plant, tools, materials and earthing equipment (if any) have been removed.

Maximum penalty: \$2,000.

PART 5—WORK ON OR NEAR HIGH VOLTAGE EXPOSED CONDUCTORS**Application**

37. This Part applies to all work to which this Regulation applies that is carried out on or near high voltage exposed conductors.

Safety procedures for work on or near high voltage exposed conductors

38. (1) An employee must not work on or near high voltage exposed conductors, and an employer must not permit or require an employee to carry out such work, unless the employee is authorised to do so by an access permit or by the holder of an access permit.

Maximum penalty: \$2,000.

(2) An employer must not permit or require an employee to so work on or near high voltage exposed conductors unless the employer has caused the following things to be done in the following order:

- (a) the conductors must be isolated and action taken to prevent unauthorised persons from operating or interfering with the means of isolation;
- (b) the conductors must be proved to be de-energised by means approved by the employer;
- (c) the conductors must, immediately after proving to be de-energised, be earthed and short-circuited by means approved by the employer:
 - except to the extent that the temporary removal of the earthing or short-circuiting equipment is necessary for specific tasks or types of apparatus, as approved by the employer; and
 - except as provided by clause 56;
- (d) if the employer considers it necessary, a safe work area must be clearly identified, by means approved by the employer;
- (e) an access permit in respect of the work must be issued to the employee in accordance with clause 39.

Maximum penalty: \$2,000.

(3) The holder of an access permit must ensure that before the work authorised by the permit is commenced every employee whom the holder of the permit has authorised to carry out the work has signed the permit.

Maximum penalty: \$2,000.

(4) The holder of an access permit must ensure that when the work authorised by the permit has been completed:

- (a) every employee authorised by the holder to undertake the work has signed the permit a second time to indicate that the employee has completed the work and has been informed that the conductors involved are from that time to be regarded as alive; and
- (b) if the access permit indicates that other access permits have been issued for carrying out the same work, all employees authorised by the holders of those other permits to carry out the work have signed the permits a second time to indicate that they have completed the work and have been informed, that the conductors involved are from that time to be regarded as alive; and

- (c) the access permit is surrendered to a person authorised to issue access permits.

Maximum penalty: \$2,000.

- (5) A person to whom an access permit is surrendered in accordance with subclause (4) must cancel the access permit in the manner approved by the employer.

Maximum penalty: \$2,000.

- (6) Nothing in this Part prevents work being carried out without the authority of an access permit in an emergency where there is immediate risk to human life or property if:

- (a) the requirements of subclause (2) (a)–(c) have been complied with; and
(b) the work is carried out under the immediate supervision of the authorised employee who caused those requirements to be complied with.

Access permits

- 39. (1)** An access permit authorises the employee named in the permit as the holder of the permit to carry out, or authorise the canying out of, the work specified in the permit.

- (2) An access permit is to be in a form approved by the employer and may be issued only by an employer, or an employee authorised by the employer for the purpose, to an employee who is responsible for the oversight of the work to which the permit relates.

- (3) A person who issues an access permit is guilty of an offence unless the permit clearly indicates:

- (a) warnings of nearby live exposed conductors; and
(b) the apparatus to be worked on and the work to be carried out; and
(c) any conditions to which the permit is subject; and
(d) the name of the holder of the access permit; and
(e) whether any other access permits have been issued for the canying out of the same work and, if so, the identifying details of each of those other access permits.

Maximum penalty: \$2,000.

- (4) The holder of an access permit must ensure that the conditions of the permit are complied with unless the employer otherwise approves in a particular case.

Maximum penalty: \$2,000.

(5) An access permit may be cancelled at any time by the person who issued it by giving notice of cancellation to the person to whom it was issued.

(6) A person must not cancel an access permit otherwise than in accordance with clause 38 (5) until the person ensures that every employee who was authorised by the permit to undertake the work has been informed that the conductors are to be regarded as alive.

Maximum penalty: \$2,000.

(7) A new access permit may be issued to authorise the continuation of work if the original access permit is cancelled before the work authorised by the original access permit has been completed.

Working earths and equipotential bonding

40. An employee carrying out work to which this Part applies, and the employee's employer, must ensure that additional working earths, short-circuits and bonds are applied to ensure equipotential conditions where necessary for the protection of any person from electric shock.

Maximum penalty: \$2,000.

Energising high voltage exposed conductors

41. An employee must not energise high voltage exposed conductors, and an employer must not permit or require an employee to carry out such energisation, unless:

- (a) the employee is authorised to perform the energisation work; and
- (b) the following things are done in the following order:
 - all plant, tools and materials are removed;
 - all working earths, short-circuits and equipotential bonds are removed;
 - all persons are clear of the conductors;
 - all employees authorised by an access permit or by the holder of an access permit to carry out work on the conductors have completed the work and have signed the access permit a second time to indicate that fact;
 - all of those access permits have been cancelled; and
- (c) all earthing and short-circuiting equipment associated with work carried out under an access permit has been removed; and

- (d) any means used for the purposes of clause 38 to distinguish the conductors from in-service or live electrical apparatus have been removed.

Maximum penalty: \$2,000.

PART 6—ADDITIONAL REQUIREMENTS FOR WORK IN ELECTRICAL STATIONS

Application

42. This Part applies to all work carried out on any electrical apparatus, or on or near any exposed conductors, in electrical stations containing high voltage electrical apparatus or in generating stations and applies in addition to the other requirements of this Regulation.

Entry

43. (1) An employee must not enter an area in an electrical station or generating station where there are live exposed conductors, and an employer must not permit or require an employee to enter such an area, unless the employee:

- (a) is authorised by the employer to enter the area and has normal duties which require entry to the area; or
- (b) has been specifically instructed by an authorised employee to enter the area and has been clearly instructed, on the site, as to the limits of the area that may be entered, the dangers existing and the precautions that must be observed; or
- (c) has been specifically instructed by an authorised employee to enter the area and is accompanied by an authorised employee.

(2) An employee who enters an area where there are live exposed conductors in accordance with a specific instruction referred to in subclause (1) (c) must comply with any directions concerning safety that are given to the employee by the accompanying authorised employee.

(3) An employer is not to authorise an employee to enter an area where there are live exposed conductors unless the employer is satisfied that the employee is aware of the danger.

(4) An employer must not authorise an employee for the purposes of subclause (1) (c) unless satisfied that the employee is aware of the danger and is capable, in an emergency, of de-energising the appropriate electrical apparatus and carrying out rescue and resuscitation operations.

(5) An employee entering any generating station, substation, or switching station, except for brief periods of inspection, must not cause there to be any obstruction to free exit.

Maximum penalty: \$2,000.

PART 7—ADDITIONAL REQUIREMENTS FOR CABLE WORK

Application

44. This Part applies to all work to which this Regulation applies involving cable work and applies in addition to the other requirements of this Regulation.

Precautions for work on or near cables

45. (1) An employee must not physically handle a high voltage cable while it is alive unless it is completely surrounded by an earthed metal sheath or screen, or both, and precautions are taken, where necessary, to avoid danger from induced voltages and transferred earth potentials.

(2) An employee must not physically handle a cable, whether sheathed or screened or not, if its condition is suspect or doubtful unless the cable is proved to be de-energised.

(3) An employer must not permit or require an employee to excavate in the vicinity of a live cable if, in the opinion of the employer, there is a likelihood that the cable insulation may be damaged unless:

- (a) a safe work procedure is used, as approved by the employer; and
- (b) the employee is trained in that procedure; and
- (c) the employee is closely supervised during the work by another employee trained in that procedure.

Maximum penalty: \$2,000.

Identification of cables before work

46. An employee must not commence work on any cable until the cable has been:

- (a) identified by a method approved by the employer; and
- (b) in the case of a low voltage cable, identified as low voltage; and
- (c) in the case of a high voltage cable, proved to be de-energised by a method approved by the employer.

Maximum penalty: \$2,000.

**PART 8—ADDITIONAL REQUIREMENTS FOR OVERHEAD
LINE WORK****Application**

47. This Part applies to all work to which this Regulation applies involving work on overhead lines and applies in addition to (and, in the event of an inconsistency, overrides) the other requirements of this Regulation.

Identification of overheadlines before work commences

48. An employee must not commence work on any overhead line until the overhead line, at the point where the work is to be carried out, has been identified and the relevant provisions of Parts 4 and 5 have been complied with.

Maximum penalty: \$2,000.

Soundness of poles or structures

49. An employee must not ascend a pole or structure which is found to have suffered deterioration or damage to a degree which may cause it to collapse, and an employer must not require an employee to ascend any such pole or structure, until it is effectively secured.

Maximum penalty: \$2,000.

Work on or in vicinity of existing overhead lines

50. An employee must not erect any overhead line above, below or alongside an existing overhead line in such a position that the line in the course of erection may be energised by any means, and an employer must not permit or require an employee to erect any overhead line in such a position, unless precautions have been taken:

- (a) to prevent the line in course of erection from becoming so energised; or
- (b) to safeguard employees in the event of the line in course of erection becoming energised.

Maximum penalty: \$2,000.

Work in vicinity of live low voltage overhead lines

51. (1) An employee must not pass between the conductors of a live low voltage overhead line at any point where the conductors are spaced less than 1200 mm apart unless precautions, approved by the employer, are taken to prevent electric shock.

(2) An employee must not work on or near a live low voltage overhead line unless precautions, approved by the employer, are taken to prevent electric shock.

Maximum penalty: \$2,000.

Work on live high voltage overhead lines

52. (1) An employee must not carry out work on live high voltage overhead lines, and an employer must not permit or require an employee to carry out such work, unless:

- (a) precautions are taken, before the work commences, to prevent the operation of auto-reclose devices; and
- (b) all members of the work party have already performed and are familiar with similar work under de-energised conditions using live line techniques; and
- (c) the employer has ensured that any member of the work party who has not carried out the live line technique during the previous 12 months has received refresher training from an authorised person qualified in live line working; and
- (d) the following minimum safe working distances are observed, except where a procedure approved by the employer is adopted for work directly on exposed conductors:

Nominal Voltage (volts)	Minimum Safe Working Distance (millimetres)
up to 33 000	500
above 33 000 but not exceeding 68 000	600
above 66 000 but not exceeding 132 000.....	1 200
above 132 000 but not exceeding 330 000.....	2 000
above 330 000	3 200

Maximum penalty: \$2,000.

(2) An employer must keep suitable records relating to each member of a live line working party to indicate each date on which live line work was carried out by the member concerned and the training and re-training given.

Maximum penalty: \$2,000.

(3) All members of the live high voltage overhead line working party must follow the live line technique approved by the employer and all associated safety precautions in the live line technique.

Maximum penalty: \$2,000.

(4) The employer must ensure that, in cases where elevating work platforms and the like are required to be used as part of a live line technique, members of the live line working party using the equipment are competent to operate it safely in the manner required by the technique.

Maximum penalty: \$2,000.

(5) The employer must instruct the employee in any other precautions to be observed for the safe performance of the work.

Maximum penalty: \$2,000.

(6) An employee must comply with any such instructions given to the employee.

Maximum penalty: \$2,000.

(7) This clause does not apply to operating work or work on live traction overhead wiring systems.

PART 9—ADDITIONAL REQUIREMENTS FOR WORK ON HIGH VOLTAGE TRACTION SYSTEMS

Application

53. This Part applies to all work to which this Regulation applies involving work on high voltage traction overhead wiring systems and applies in addition to (and, in the event of an inconsistency, overrides) the other requirements of this Regulation.

Work on rail connected high voltage traction overhead wiring systems

54. (1) An employee must not carry out work on rail connected high voltage traction overhead wiring systems, and an employer must not permit or require an employee to carry out such work, unless documentation authorising the carrying out of the work has been issued to the employee by the employer for all work that requires a section or subsection of overhead wiring system to be de-energised, isolated, tested as de-energised or rail connected.

Maximum penalty: \$2,000.

(2) The documentation referred to in subclause (1) is to be issued instead of an access permit and clause 39 applies to that documentation in the same way as it applies to an access permit.

(3) The requirements of clause 38 (2) (c) are satisfied if the connections between the overhead wiring and the traction rail are approved by the employer.

(4) An employer must ensure that adequate protection is provided to employees carrying out work referred to in subclause (1) to enable persons, plant and materials to be moved clear to allow trains to pass though the section being worked on.

Maximum penalty: \$2,000.

Connections to rail

55. An employee must not install a connection between the traction overhead wiring and rail unless:

- (a) the traction overhead wiring has been de-energised, isolated and tested to be de-energised by a means approved by the employer; and
- (b) the rail connection is connected to a designated traction rail in a manner approved by the employer.

Maximum penalty: \$2,000.

Work on 1 500 volt (nominal) direct current equipment within traction substations

56. The requirements of clause 38 (2) (c) do not apply to work on 1 500 volt (nominal) direct current equipment within traction substations.

Required distances from certain live objects and equipment

57. An employee must not, either directly or through any conducting material, come within 500 mm of any object or equipment that is live at 1 500 volts (nominal) direct current.

Maximum penalty: \$2,000.

Work on live 1 500 volt (nominal) direct current traction overhead wiring systems

58. An employee must not carry out work on live 1 500 volt (nominal) direct current traction overhead wiring systems, and an employer must not permit or require an employee to carry out any such work, unless the employee:

- (a) works from and on a ladder approved by the employer that is free from metal fittings or wires (other than metal sockets on collapsible or extension ladders); and
- (b) is not required, directly or through any conducting material, to come within 500 mm of any object or equipment that is at rail or earth potential or of any other overhead wiring section; and
- (c) ensures that no sections of overhead wiring are bridged at air gaps, section insulators, mid-track insulators and the like except under special instructions given by the employer; and
- (d) ensures that adequate protection is provided to enable persons, plant and materials to be moved clear to allow trains to pass through the section being worked on.

Maximum penalty: \$2,000.

PART 10—SAFETY EQUIPMENT AND OTHER TOOLS**Application**

59. This Part applies to all work to which this Regulation applies.

Provision and maintenance of safety equipment and other tools

60. (1) An employer must provide insulating materials, personal safety equipment, tools, working aids, test and rescue equipment and any other equipment necessary for the safety of its employees at all times, having regard to the nature of the work to be performed.

(2) An employer must cause each item of such equipment and other tools in use to be kept in good working order and repair.

(3) An employer must cause the condition of such equipment and tools to be checked, at sufficiently frequent intervals to ensure that they are safe to be used.

(4) The employer must keep records of the checks and their results.

(5) An employer must immediately withdraw from use any such equipment or tool found to be defective.

(6) An employer must cause any such equipment or tool to be clearly marked, and recorded, as defective.

(7) An employer must not re-issue any such equipment or tool until the defect has been remedied.

Maximum penalty: \$2,000.

Use of safety equipment

61. (1) Having regard to the nature of the work to be done, an employee must use safety equipment and other tools in the manner approved by the employer.

(2) An employee must inspect safety equipment and other tools before use to check serviceability.

(3) An employee must only use safety equipment and other tools which are in good order and condition.

(4) An employee, on becoming aware of any defect in safety equipment or other tools, must immediately stop using such equipment or tools if the defect is dangerous.

(5) The employee must notify the employer of the defect.

Maximum penalty: \$2,000.

PART 11—ACCIDENT REPORTING AND INVESTIGATION

Notification of serious electrical accidents

62. (1) For the purposes of section 27E (1) (b) of the Act, an employer is a prescribed person in respect of an accident arising out of work to which this Regulation applies.

(2) For the purposes of section 27E (2) of the Act, notice of a serious electrical accident arising out of work to which this Regulation applies must be given to the Corporation:

(a) by telephone or facsimile at the first available opportunity after the accident in normal business hours; and

(b) in writing, in a form approved by the Corporation, within 10 working days of the accident.

SCHEDULE 1—QUALIFICATIONS AND TRAINING

(Cl. 12, 13, 14, 17, 19)

Part 1

Sydney Electricity
The Prospect County Council
The Shortland County Council
The Electricity Commission of New South Wales

Part 2

Sydney Electricity
The Prospect County Council
The Shortland County Council
The Illawarra County Council

Part 3

Sydney Electricity
The Prospect County Council
The State Rail Authority of New South Wales
The Electricity Commission of New South Wales
The Local Government Electricity Association of New South Wales

Part 4

The State Electricity Commission of Victoria
The Electricity Trust of South Australia
The State Energy Commission of Western Australia
The Hydro-Electric Commission, Tasmania
The Industrial Training Commission of Victoria
The South East Queensland Electricity Board
Australian Capital Territory Electricity and Water

Part 5

The Electricity Commission of New South Wales
The Shortland County Council

Part 6

The State Rail Authority of New South Wales

Part 7

Sydney Electricity
 The Prospect County Council
 The Electricity Commission of New South Wales
 The Local Government Electricity Association of New South Wales.

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SCHEDULE 1—QUALIFICATIONS AND TRAINING

EXPLANATORY NOTE

The object of this Regulation is to repeal the Overhead Line (Workers) Regulations 1964 and to replace them with a new Regulation. The new Regulation:

- (a) defines work to which the Regulation applies as king (with specified exceptions):
 - work on high voltage electrical apparatus or on or near high voltage exposed conductors; and
 - work OR low voltage electrical apparatus or on or near low voltage exposed conductors, owned or leased by an electricity supply authority or supply of electricity to the public; and
 - work on any electrical apparatus, or on or near any exposed conductors, in electrical stations containing high voltage electrical apparatus or in generating stations; and
- (b) prescribes standards of safety and requirements that must be observed by employers who are electricity supply authorities, or who own or lease such electrical apparatus, and by their employees when carrying out such work; and
- (c) specifies the qualifications and training required for the carrying out of such work; and
- (d) creates offences for non-compliance with certain provisions of the Regulation.

This Regulation is made in connection with the staged repeal of subordinate legislation under the Subordinate Legislation Act 1989.
