

Occupational Licensing (Private High Voltage Electrical Work – Certification and Energisation) Determination 2016

Occupational Licensing Act 2005

DOC/16/14599 (v1.0)

I, Dale Edward Webster, Administrator of Occupational Licensing, make this Determination for the purposes of regulation 20 of the *Occupational Licensing (Electrical Work) Regulations 2008* and the approved a certification of compliance.

1. Short Title

This Determination may be cited as the *Occupational Licensing (Private High Voltage Electrical Work - Certification and Energisation) Determination 2016*.

2. Commencement

This Determination takes effect on 7 December 2016

3. Revocation of previous Notice

The Occupational Licensing (Certification of Private High Voltage Electrical Work) Notice 2013 is revoked

4. Purpose

- (a) To facilitate the granting of permission to energise private high voltage electrical equipment this Determination sets out the obligations regarding the process and the minimum content of the approved certification of compliance that may be submitted to an authorised officer, for the purposes of regulation 20 of the *Occupational Licensing (Electrical Work) Regulations 2008*, regarding restrictions on energising high voltage electrical work.
- (b) This Determination is also intended to support the obligations of an authorised officer under regulation 19(1) (b) of the *Occupational Licensing (Electrical Work) Regulations 2008*, regarding the inspection of electrical work.

5. Application of Acts Interpretation Act 1931

The Acts Interpretation Act 1931 applies to this Determination.

6. Interpretation

In this Determination, unless the context otherwise requires –

“**Act**” means the *Occupational Licensing Act 2005*.

“**Administrator**” means the Administrator of Occupational Licensing appointed under section 10 of the Act.

“**AS 2067**” means AS 2067:2008, *Substations and high voltage installations exceeding 1 kV a.c.* issued by Standards Australia and distributed by SAI Global Limited (ACN 050 611 642), as amended, revised or superseded from time to time.

“**AS/NZS 3000**” means AS/NZS 3000:2007, *Electrical Installations (known as Australia/New Zealand Wiring Rules)* issued by Standards Australia and distributed by SAI Global Limited (ACN 050 611 642), as amended, revised or superseded from time to time.

“**AS/NZS 7000**” means AS/NZS 7000:2010, *Overhead line design – Detailed procedures*, issued by Standards Australia and distributed by SAI Global Limited (ACN 050 611 642), as amended, revised or superseded from time to time.

“**Australian Standards**” means the standards issued by Standards Australia and distributed by SAI Global Limited (ACN 050 611 642).

“**authorised officer**” means a person appointed as an authorised officer pursuant to section 16(1) of the Act.

“**CEC**” means Certificate of Electrical Compliance, which phrase has the meaning given it by the *Occupational Licensing (Approved Forms – Electrical) Determination 2016*, as revised or amended from time to time.

“**certification of compliance**” means the approved certification of compliance pursuant to regulation 20 (1) (a) of the Regulations, as required by this Determination.

“**contractor**” has the meaning given by section 3 of the Act, in respect to electrical work.

“**currently competent**” means the obtained and suitably maintained, application of specified skills and knowledge and the ability to transfer and apply the skills and knowledge to new situations and environments.

“**electricity entity**” has the meaning given it by regulation 3 of the Regulations.

“**electrical installation**” has the meaning of given by regulation 3 of the Regulations.

“**electrical work**” has the meaning given it by regulation 4 of the Regulations.

“**Engineers Australia**” means the Institution of Engineers Australia (ABN 63 020 415 510), trading as Engineers Australia.

“**fit for purpose**” means the electrical installation, apparatus and equipment, has been designed and is in an appropriate condition to meet the operational design specifications and standards for the electrical installation.

“**good electricity industry practice**” means a level and standard of skill, diligence, prudence and foresight that reasonably would be expected of those who work on, operate or maintain electrical installation and electrical infrastructure consistent with applicable laws, regulations, licenses, codes, reliability, safety and environmental protection obligations.

“high voltage” has the meaning given to it by regulation 3 of the Regulations.

“like for like” has the meaning given it by clause 6 of the *Occupational Licensing (Classification of Electrical Work) Determination 2016*, as revised or amended from time to time

“network service provider” has the meaning given it by the ‘National Electricity Rules’, as amended from time to time

“practitioner” has the meaning given by section 3 of the Act, in respect of electrical work.

“private” means not owned by an electricity entity.

“recognised design and construction drawings” means a set of approved and certified drawings and documentation, for the design, construction and testing requirements of the high voltage installation, which:

- a) has previously been provided with a certification of compliance in accordance with clause 9 for the specific high voltage installation design, by a person qualified to do so in accordance with clause 11;
- b) is published in a design and construction manual or equivalent: and
- c) is managed in a quality control system.

“Regulations” means the *Occupational Licensing (Electrical Work) Regulations 2008*.

“standard high voltage electrical work” means high voltage electrical work that is performed in accordance with recognised design and construction drawings.

“standards of work” means those requirements for the performance of electrical work established by the *Occupational Licensing (Standards of Electrical Work) Code of Practice 2016*, as revised or amended from time to time.

7. Application of this Determination

- 1) This Determination does not apply to ‘like for like’ high voltage electrical work, which must be recorded.
- 2) Private high voltage electrical work must be certified.
- 3) Private high voltage electrical work, excluding ‘like for like’ high voltage work, must not be energised, unless:
 - (a) a certification of compliance is completed, as required by clause 10, for private standard high voltage electrical work, by the electrical Contractor responsible for the work, or in the absence of an electrical Contractor, the asset owner having the management and control of the electrical work; or
 - (b) an approved certification of compliance, as required by clause 9, is completed, submitted to and accepted by an authorised officer: or
 - (c) an authorised officer otherwise permits.
- 4) In relation to subclause 3)(a) and 3)(b) above, prior to the energisation of private high voltage electrical work, the certification of compliance is acknowledgement that the private high voltage electrical work has been:

- (a) inspected;
 - (b) verified;
 - (c) tested; **and**
 - (d) is fit for purpose and safe to energise.
- 5) In relation to subclause 3)(c) above, where the authorised officer otherwise permits the private high voltage electrical work to be energised, the authorised officer must as far as practicable:
- (a) Inspect; **or**
 - (b) Cause to be inspected

the private high voltage electrical work.

8. Certification process

- 1) There are two certification of compliance processes established by this Determination:
 - (a) Private high voltage electrical work, which must be certified:
 - (i) in accordance with clause 9; **and**
 - (ii) by a person in accordance with clause 11.
 - (b) Private standard high voltage electrical work if not in accordance with clause 8 (1) (a), which must be certified:
 - (i) in accordance with clause 10; **and**
 - (ii) by a person in accordance with clause 11.
- 2) The certification of compliance must include documents and evidence to verify the requirements of clauses 9 and 10.

9. Certification of compliance for Private High Voltage Electrical Work

For the purposes of clauses 7(2) and 8(1)(a), the certification of compliance for private high voltage electrical work must contain:

- 1) the address or location of where the private high voltage electrical work was performed;
- 2) documents:
 - (a) from each electrical Contractor or, in the absence of an electrical Contractor, each practitioner that is responsible for each and every part of the private high voltage electrical installation that is the subject of the certification of compliance, to verify that:

- (i) those parts have been constructed, tested, inspected and comply with the standards of work (this can be a copy of all the CECs or records of the electrical work): **and**
 - (ii) the practitioners that performed the electrical work are licensed and currently competent to perform the high voltage electrical work;
 - (b) that the electrical equipment has type test certification, as and when appropriate: **and**
 - (c) verifying that consideration had given to the effect of the private high voltage electrical work, that is the subject of the certification of compliance, upon any other parts of the electrical installation or any other customer's installations;
- 3) documents verifying that at the time of the signing and dating of the certification of compliance:
- (a) the installation had, on the premises, if practicable and as required, a set of up-to-date:
 - (i) operation and maintenance manuals;
 - (ii) safety instructions for the operation of the electrical installation: **and**
 - (iii) drawings and operating diagrams;
 - (b) procedures and systems are in place for the safe:
 - (i) operation;
 - (ii) provision of access: **and**
 - (iii) maintenance of the electrical installation; **and**
 - (c) the network service provider has approved and granted permission for:
 - (i) the electrical installation to be connected to the network service provider's distribution network: **and**
 - (ii) that the network connection agreement specifications have been met;
- 4) verification provided by a person qualified to do so under clause 11, that the:
- (a) electrical work and electrical installation:
 - (i) complied with the standards of work;
 - (ii) had been performed to or meets good electricity industry practice;
 - (iii) had been tested: **and**
 - (iv) had been inspected;
 - (b) high voltage electrical installation was:
 - (i) fit for purpose: **and**
 - (ii) safe to energise: **and**
 - (c) certification of compliance, is true and correct in all material particulars.

Note: Appendix A is a sample how the Private High Voltage Electrical Work Certification of Compliance, may be presented in accordance with clause 9.

10. Certification of compliance for Private Standard High Voltage Electrical Work

For the purposes of clauses 7(2) and 8(1)(b) the certification of private standard high voltage electrical work must contain:

- 1) the address or location of where the private high voltage electrical work was performed;
- 2) documents, provided by the practitioner responsible for the electrical work, to certify the electrical work:
 - (a) had been tested in accordance with clause 10(4);
 - (b) had been inspected: **and**
 - (c) complied with the;
 - (i) recognised design and construction drawings: **and**
 - (ii) standards of work;
- 3) documents or a statement provided by the electrical Contractor or in the absence of an electrical Contractor the asset owner having the management and control of the electrical work, verifying, at the time of the signing and dating of the certification of compliance, that:
 - (a) the installation, is;
 - (i) safe to energise: **and**
 - (ii) fit for purpose;
 - (b) the electrical equipment has type test certification, as and when appropriate;
 - (c) identified:
 - (i) the practitioners that performed the electrical work are licensed, and currently competent to perform the private standard high voltage electrical work;
 - (ii) the private standard high voltage electrical work performed and its location;
 - (iii) the specific recognised design and construction drawings required to perform the standard high voltage electrical work: **and**
 - (iv) that construction, verification, and testing was in accordance with the recognised design and construction drawings;
 - (d) the network service provider has approved and granted permission for the electrical installation to be connected to the network service provider's distribution network and that the network connection agreement specifications have been met;
 - (e) the installation, has on the premises, if practicable and as required, a set of up-to-date:
 - (i) operation and maintenance manuals;
 - (ii) safety instructions for the operation of the electrical installation: **and**
 - (iii) drawings and operating diagrams;

- (f) procedures and systems are in place for the safe:
 - (i) operation;
 - (ii) provision of access: **and**
 - (iii) maintenance of the electrical installation: **and**
- (g) the certification is true and correct in all material particulars;

Note

*Appendix B is an sample how the Private Standard High Voltage Electrical Work Certification of Compliance may be presented; **and***

Appendix C provides some guidance notes on the certification of private standard high voltage electrical work in accordance with clause 10.

- 4) for the purposes of clause 10(2)(a) testing must include, but is not limited to:
 - (a) insulation resistance tests;
 - (b) earthing system impedance tests;
 - (c) other inspection and test routines consistent with good electricity industry practice;
and
 - (d) allowance for specific site conditions and transferred voltage/s, including but not limited to:
 - (i) any conductive structure or infrastructure, reinforced foundations, pipelines, fences or railway tracks in the vicinity of the installation;
 - (ii) the effect on other electrical installations during normal operations or under fault conditions: **and**
 - (iii) the effect of telecommunications and control networks on site.

11. Those who may certify the certification of compliance

- 1) The certification of compliance for private high voltage electrical work must be certified as being true and correct in all material particulars by a person who at the time of certification is currently competent in the electrical engineering disciplines relevant to the private high voltage electrical work being certified and be:
 - (a) a Chartered Professional Engineer accredited by Engineers Australia or of an equivalent status with an equivalent Australian organisation and have not less than four years practical experience in the relevant disciplines of the private high voltage electrical work being certified; **or**
 - (b) a Chartered Engineering Technologist or Chartered Engineering Associate accredited by Engineers Australia, or of an equivalent status with an equivalent Australian organisation, and have not less than four years practical experience in the relevant disciplines of the private high voltage electrical work being certified gained while working under the supervision of a person satisfying the requirements of clause 11(1)(a): **or**

- (c) approved by the Administrator, after having satisfied that they have the equivalent competence, qualifications and experience to that otherwise mentioned in clauses 11(1)(a) or (b).
- 2) The certification of compliance for standard private high voltage electrical work must be certified as being true and correct in all material particulars by either:
- (a) a person who meets the requirements of clause 11(1): or
 - (b) a person who is at the time of certification the holder of an electrical Contractor's licence and is competent to perform the private standard high voltage electrical work.

12. Energisation of high voltage electrical work

- 1) For the purposes of regulation 20(1) (a) of the *Occupational Licensing (Electrical Work) Regulations 2008*, and in light of regulation 19 and the balance of regulation 20, the permission to energise high voltage electrical work has two categories:
 - (a) private high voltage electrical work: and
 - (b) private standard high voltage electrical work.
- 2) Private high voltage electrical, excluding 'like for like' private high voltage electrical work, work must only be energised:
 - (a) upon the acceptance of the Certification of Compliance by an authorised officer: or
 - (b) if an authorised officer otherwise permits.
- 3) An electrical Contractor or asset owner may only energise private standard high voltage electrical work:
 - (a) upon the completion of the Certification of Compliance as per clause 10; or
 - (b) upon the acceptance of the Certification of Compliance by an authorised officer: or
 - (c) if an authorised officer otherwise permits.
- 4) A person who energises private high voltage electrical work or standard high voltage electrical work, must record and notify the electrical work as provided by the Regulations.



Dale Edward Webster

Administrator of Occupational Licensing

Date: 7 December 2016

EXPLANATORY NOTES

1. This determination does not remove or diminish any obligations imposed by:
 - a. Regulation 16 of the Regulations and the Occupational Licensing (Classification of Electrical Work) Determination, with regard to the classification of high voltage electrical work.
 - b. Regulation 18 of the Regulations and the Occupational Licensing (Classification of Electrical Work) Determination, with regard to the notification of high voltage electrical work.
 - c. Regulation 19 of the Regulations, 'inspection of electrical work' with regard to the authorised officer inspecting or causing to be inspected, any electrical work of a high voltage nature.
 - d. Regulation 20 of the Regulations, 'Restrictions on energising of electrical work', with regard to the acceptance or permission to energise high voltage electrical work.
2. In respect of the Certificate of Electrical Compliance (CEC), please note, there may be more than one CEC associated with work undertaken at a private high voltage electrical installation.
3. Appendix A is a sample of how the Private High Voltage Electrical Work Certification of Compliance, may be presented.
4. Appendix B is a sample of how the Private Standard High Voltage Electrical Work Certification of Compliance, may be presented.
5. Appendix C includes guidance notes for the processes of certification of private standard high voltage electrical work.
6. Appendix D provides clarification in the application of Regulation 20(2)(b), with regard to 'performing substantially the same function' which is considered to be 'like for like high voltage electrical work'.

Appendix A Sample – Private High Voltage Electrical Work Certification of Compliance

(may have your business logo and details if desired)

I (name) of (business name) certify that I have verified all the relevant aspects of the high voltage electrical installation at the address below, as being safe to energise and fit for purpose.

Business, building or complex name:

Location or address:

.....

In certifying the above mentioned private high voltage electrical work, I have considered the following and hold the view that the high voltage electrical installation has been constructed and tested in accordance with good electricity industry practice and complies with all relevant Australian Standards, including but not limited to, AS/NZS 3000, AS 2067, and AS/NZS 7000.

In particular I verify that the:

- contractor/s and/or practitioner/s have completed Certificate of Electrical Compliance as required;
- persons that performed the electrical work are licensed and currently competent to perform the high voltage electrical work;
- standards of work have been met with particular regard to, but not limited to:
 - electrical installation earthing;
 - earth potential rise;
 - step and touch voltages;
 - electrical circuit protection;
 - high voltage cable installation;
 - high voltage cable terminations: and
 - other applicable standards (to be set out);
- electrical installation under operational or fault conditions, will not affect other portions of the electrical installation or the electrical installations of other customers;
- electrical equipment used in the high voltage electrical installation, has type test certification, when and as appropriate;
- relevant inspection and testing has been conducted;
- network service provider has approved in writing and granted permission for the electrical installation to be connected to their network;
- electrical installation, has on the premises if practicable and as required, a set of up-to-date:
 - operation and maintenance manuals;
 - safety instructions for the operation of the electrical installation: and
 - drawings and operating diagrams: and
- procedures and systems are in place for the safe operation, provision of access and maintenance of the installation.

My qualifications and experience satisfy the requirements of clause 11 of the Occupational Licensing (Private High Voltage Electrical Work - Certification and Energisation) Determination 2016.

I have provided supporting documentation, as relevant, to verify the above and will on request provide further documents.

I certify that this certification of compliance is true and correct in all material particulars.

Signed Name Date

Appendix B

Sample – Private Standard High Voltage Electrical Work Certification of Compliance

(may have your business logo and details if desired)

I (name) of (business name) certify that I have verified all the relevant aspects of the specified private standard high voltage electrical work at the address below, as being safe to energise and fit for purpose.

Business, building or complex name:

Location or address:
.....

Description/diagram of private standard high voltage electrical work;
.....
.....

The private standard high voltage electrical work has been performed to the following recognised design and construction drawings;

.....
.....

In certifying the above mentioned private standard high voltage electrical work, I have considered and hold the view the electrical work has been performed in accordance with good electricity industry practice and complies with the above recognised design and construction drawings.

In particular I certify that the:

- practitioners:
 - that performed the electrical work are licensed;
 - have demonstrated competence to perform the high voltage electrical work: and
 - have completed CECs and certified the work as being compliant, as required;
- electrical equipment used in the high voltage electrical installation, has type test certification, when and as appropriate;
- work has been installed and commissioned to the above recognised design and construction drawings;
- inspection and testing has been conducted;
- network service provider has approved in writing and granted permission for the electrical installation to be connected to their network;
- electrical installation, has on the premises, if practicable and as required, a set of up-to-date:
 - operation and maintenance manuals;
 - safety instructions for the operation of the electrical installation: and
 - drawings and operating diagrams, to allow for operational and maintenance personnel to provide for safe and efficient interventions in the installation.
- procedures and systems are in place for the safe operation, provision of access and maintenance of the installation.

I have attached supporting documentation, as relevant, to verify the above and will on request provide further documents.

I certify that this certificate of compliance is true and correct in all material particulars.

Name Signed

Contractor Lic. No. Date

Appendix C

Guidance notes regarding Private Standard High Voltage Electrical Work Certification

Private standard high voltage electrical work is electrical work to recognised design and construction drawings that are published and managed in a quality controlled document management system by the owners of or contractors for the high voltage electrical work or assets. The approval process and system for the classification of recognised design and construction drawings includes the application of a Certification of Compliance, as per clause 9, for the specific private standard high voltage electrical work and installation covered by the recognised design and construction drawings.

In the process of certifying private standard high voltage electrical work to clause 10, the following is to be considered:

- (a) The electrical Contractor or owner managing the private standard high voltage work must ensure:
- (i) only competent and appropriately licensed practitioners perform the private standard high voltage electrical work;
 - (ii) the private standard high voltage electrical work complies with the relevant standards of work;
 - (iii) there are appropriate safe work systems and instructions to perform, test and certify the work;
 - (iv) good electricity industry practice principles are applied to the design and planned work for the high voltage electrical installation;
 - (v) the design specifications for the high voltage electrical installation is approved by a person qualified to do so in accordance with clause 11;
 - (vi) there are, on the premises if practicable and as required, prior to energisation, up-to-date:
 - i. operation manuals, procedures and safe access systems: and
 - ii. drawings and operating diagrams, to allow for operational and maintenance personnel to provide for safe and efficient interventions in the installation;
 - (vii) there are procedures and systems in place for the safe operation, maintenance of and safe access to, the private standard high voltage electrical installation;
 - (viii) the network service provider:
 - i. has approved and granted permission for the private standard high voltage electrical installation to be connected to the network service provider's distribution network: and
 - ii. the network connection agreement specifications have been met;
 - (ix) recording and certification of the private standard high voltage electrical work is completed and a copy provided to the customer/asset owner: and
 - (x) all appropriate notifications are completed and submitted.
- (b) A practitioner who performs the work, must:
- (i) be competent and hold a licence of the appropriate class, to perform, test, verify and certify the private standard high voltage electrical work;
 - (ii) implement the electrical Contractor's safe work systems and instructions to perform, verify, test and certify the private standard high voltage electrical work;
 - (iii) apply good electricity industry practice principles: and
 - (iv) record, take responsibility for and certify the compliance of the private standard high voltage electrical work, that they are responsible for.

Appendix D

Regulation 20(2)(b) and like for like high voltage electrical work

The phrase from regulation 20(2)(b), “where the electrical work performed involves, in the course of carrying out repairs, the replacement of a component part with another component part performing substantially the same function”, is considered to be like for like high voltage electrical work as is defined in the *Occupational Licensing (Classification of Electrical Work) Determination 2016*.

Recording and certification of like for like high voltage electrical work

All like for like high voltage electrical work must be recorded and certified in accordance with regulation 17 of the Regulations, including the requirement to provide the customer a copy of that record of electrical work.

The certification of like for like high voltage electrical work can be either the completed:

- (a) Certificate of Electrical Compliance: or
- (b) certification of compliance, as per clause 9 or 10 of this Determination.

Energising like for like high voltage electrical work

Like for like high voltage electrical work shall only be energised when the electrical Contractor, or the asset owner, who is responsible for the like for like high voltage electrical work, permits the energisation.

The permission to energise is to be based on the practitioner’s record of electrical work, which sets out that the inspection, testing, verification and certification that the like for like high voltage work is:

- (a) compliant;
- (b) fit for purpose: and
- (c) safe to energise.

Notification of like for like high voltage electrical work

For the purposes of regulation 18 of the Regulations, like for like high voltage electrical work must be notified as specified in the *Occupational Licensing (Classification of Electrical Work) Determination 2016*.

What to consider in the certification of like for like high voltage electrical work

The process of certifying like for like high voltage electrical work must meet certain requirements:

- (a) the electrical Contractor or asset owner having the management and control, or in the absence of an electrical Contractor or asset owner, the practitioner, must ensure;
 - (i) only competent and appropriately licensed practitioners perform the electrical work;
 - (ii) the electrical work complies with the relevant standards of work;
 - (iii) that there are safe work systems and instructions to perform, inspect, test and certify the electrical work: and
 - (iv) the record and certification of the electrical work is completed and a copy is provided to the customer/owner of the assets, as soon as practicable;
- (b) the practitioner who performs the like for like high voltage electrical work, must;
 - (i) be competent and hold a current licence of the appropriate class, to perform, test, verify and certify the electrical work;
 - (ii) implement the electrical Contractor’s safe work systems and instructions to perform, verify, test and certify the electrical work;
 - (iii) record, take responsibility for and certify the compliance of the private standard high voltage electrical work, that they are responsible for.

Contact details

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