



Our Ref:
Enquiries: Customer Service Officer
Telephone: (08) 9422 5282

Dear Sir/Madam

Electrical Transmission Equipment for Ground Geophysical Surveys

Thank you for your enquiry about the above equipment and the associated electrical installation work performed in the field.

Typically the equipment consists of a portable generator connected to a frequency-shift/transmission device that produces both variable frequency and voltage with an associated current flow dependent upon the resistivity of the ground path. Attached to the transmission device are two cables (generally 2.5 mm² flexible cable) installed over the ground and terminated at two electrode pits separated by some distance, generally 1 to 5 kilometres. The voltages generated by the frequency shift device can be up to 3000 Volts, well in excess of the internationally accepted safe limit of 50 Volts at 50 Hz.

If your company is involved in the above survey activity using equipment as described above, then the following electrical regulatory requirements apply to the safe installation and operation of the equipment.

Deploying the generation and transmission equipment, associated cables and electrodes for ground geophysical surveys within Western Australia comprises an electrical installation, is electrical work as defined under the *Electricity (Licensing) Regulations 1991* and is subject to regulation.

Recognising the characteristics of the work, equipment used and location, this office will consider an application of either of the following arrangements to satisfy legislative requirements:

1. Alternative Electrical Licensing Arrangement – Permit Scheme

A permit scheme (Ground Geophysical Survey Equipment Permit) for company employees is available whereby a company submits an application form certifying the competence of suitable employees to perform work in accordance with a Safe Work Procedures document certified by a chartered electrical engineer. The company is to perform the following:

i) Electrical Safe Work Procedures

Electrical safe work procedures for the installation and protection of the electrical equipment (generator, transmission equipment, cables and pit-electrodes) are required.

ii) Certification of Electrical Safe Work Procedures

The above safe work procedures are to be certified by a professional electrical engineer on the National Professional Engineer Register to ensure the safety of persons, livestock and property against dangers and damage that may arise during installation and reasonable use and reasonable expected misuse of the above equipment. The company is to keep the original copy of the certified procedures and ensure they are observed in practice.

iii) Completed Electrical Permit Application Forms

In conjunction with the above certified documents, an application by selected company employees for an electrical permit is required, (see attached form). The company is to maintain a register of permit holders deemed competent to perform the certified safe work procedures. This office is to be advised when permit holders either leave the company or are no longer competent in the work.

A copy of the Electrical Safe Work Procedures certification applicable to each type of electrical equipment intended to be used must be submitted with this application before a permit can be issued.

Following receipt of the completed permit application forms, this office will assess and advise the company accordingly.

2. Installation by Licensed Electrician

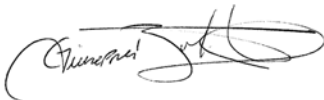
A licensed Electrician may install the equipment, but must observe the certified Electrical Safe Work Procedures mentioned above. In this case a permit or notification to this Office is not required.

To provide a transition period, during which employers and employees were able to implement the procedures to meet the above requirements, the Director of Energy Safety determined that the requirements would not be mandatory until 1 January 2003. From 1 January 2003 full compliance with the certified electrical safe working procedures by permit holders or an Electrician have been required.

Under the *Electricity (Licensing) Regulations 1991* permit holders and their company must report electrical accidents to the Director of Energy Safety (toll free telephone number: 1800 678 198). This regulatory requirement is applicable to all persons and includes electrical accidents associated with this equipment.

An "Application for a Permit for Ground Geophysical Survey Equipment" form is attached.

Yours faithfully



Joe Bonfiglio
DIRECTOR BUSINESS SERVICE

Credit card details submitted as payment remain confidential at all times

Payment Details

- Cash payment (please do not post cash)
- Cheque enclosed (made payable to Department of Commerce)
- Credit Card payment MasterCard Visa

Card Number _____ / _____ / _____ / _____ Expiry Date /

Cardholder's Name: _____ Amount \$
(PLEASE PRINT)

Cardholder's Signature: _____

Fact Sheet

Proof of identity of applicants for an electrical or gas worker's licence

March 2009

The Licensing Office of EnergySafety WA maintains a database of licensed electrical and gas operatives and ensures that the information is accurate and confidential, protecting operatives against the possible fraudulent use of their name.

Applicants for an electrical or gas worker's licence in Western Australia must prove their identity. This fact sheet explains the requirements for an applicant to prove his or her identity.

Before an electrical or gas worker's licence will be issued, applicants must prove their identity by presenting as many documents from the following lists so as to score a minimum of 100 points. The documentation provided may be a photocopy of the original document.

At least one document provided must show the signature of the applicant.

Name of the signatory verified from one of the following:

70 POINTS

- Birth Certificate / Birth Card issued by the Registry of Births, Deaths and Marriages
- Australian Citizenship Certificate
- International Travel Document / Current Passport
- Expired passport which has not been cancelled and was current within the preceding 2 years
- Other document of identity having the same characteristics as a passport (E.g. this may include some diplomatic documents and some documents issued to refugees)

Note: Additional points cannot be scored for more than one document.

Name of signatory verified from one of the following (but only where they **contain a photograph or signature** that can be matched to the signatory)

40 POINTS

- A licence or permit issued under a law of the Commonwealth, a State or Territory.
- An identification card issued to a public employee (with photo or signature)
- An identification card issued by the Commonwealth, a State or Territory as evidence of the person's entitlement to a financial benefit (with photo or signature)
- An identification card issued to a student at a secondary or tertiary education institution (with photo or signature)
- Australian drivers licence

Name and Address of signatory verified from any of the following:

35 POINTS

- Document verifying employment (A current employer, or a previous employer within the last 2 years)
- Document from a rating authority (e.g. land rates)

Name of signatory verified from any of the following:

25 POINTS

- Marriage Certificate (for maiden name only)
- Council Rates Notice
- Telephone Account
- Medicare Card
- Records of Public Utility
- Transperth Smartrider cards (for students only)

Name and Date of Birth verified from any of the following:

25 POINTS

- Records of primary, secondary or tertiary educational institution attended by the signatory within the last 10 years.
- Records of a professional or trade association of which the signatory is a member.
- Proof of Age Card
- Foreign Driver's Licence

