

Engineering Procedure
Electrical Distribution Unit

PR D 78501

Electrical Permit to Work

Version 1.2

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Procedure

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Document control

Version	Date	Author/ Prin. Eng.	Summary of change
1.0	11 November 2015	Chris Leung	First issue as a Sydney Trains document, rebranded from previous RailCorp SMS-06-EN-0598 V1.3.
1.1	20 February 2019	Nick Loveday	Update roles and position names to reflect the current organisation
1.2	17 September 2021	Deepak Sinha	Request for Electrical Permit split to separate forms for 1500V and HV.

Summary of changes from previous version

Summary of change	Section
Section 3.1.1 – Request for 1500V Permit	3.1.1
Section 3.1.2 – Request for HV Permit	3.1.2

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1. Purpose and Scope

This procedure describes the procedures required to obtain, issue, hold, work with and cancel an Electrical Permit to Work. An Electrical Permit to Work is the primary safety document for work on or near the following electrical equipment:

- High Voltage (HV) aerial lines or cables
- 1500 V DC overhead wiring or cables
- Low Voltage (LV) aerial lines or cables.

Refer to Clause 8.1 of *SMS-06-GD-0268 Working around Electrical Equipment* for situations when an Electrical Permit to Work needs to be issued. For further information on the applicability of an Electrical Permit to Work, see *PR D 78500 Electrical Permits*.

This procedure identifies the responsibilities of a person holding a Sydney Trains Electrical Permit (Permit Holder) to ensure that all members of the work party, including the Permit Holder, are protected when working on or near electrical equipment. Where Sydney Trains personnel work under a Permit issued by another Electrical Network Operator for work on or near their electrical asset, Sydney Trains personnel shall comply with the conditions of that Electrical Network Operator's permit. In such a circumstance, the remainder of this instruction does not apply.

Throughout this document and for simplicity:

- The term 'Electrical Permit to Work' is, where appropriate, abridged as 'Electrical Permit' or just 'Permit'.
- The term 'Accredited Electrical Permit Holder' is, where appropriate, abridged as 'Permit Holder'.

2. Responsibility

This document sets out specific responsibilities for persons undertaking the following tasks:

- a. Requesting Permits
- b. Writing and checking Permits
- c. Instructing Permit Holders
- d. Issuing and cancelling Permits
- e. Holding WHVI's and Authorities for Test Permits
- f. Carrying out electrical tests - Persons undertaking the tests are responsible for ensuring that the testing is carried out safely.

Any TfNSW employee may Request a Permit.

Persons performing (b) to (f) above must have the appropriate Authorisations (refer Section 6).

Nominated Electrical Engineers in each area are responsible for reviewing Electrical Permits returned to them after completion of the work covered by the Permits.

3. Overview of the Electrical Permit System

An Electrical Permit to Work or “Permit” is issued by an Authorised Person (refer Section 6) to a Permit Holder as a confirmation that it is safe to work on or near the specified electrical equipment, which has been:

- a. Isolated,
- b. Proved dead, and
- c. Earthed or rail-connected,

within the defined Electrically Safe Work Area.

The above conditions will remain until the Permit is returned and cancelled.

Only one person can be a Permit Holder at each specific work location per shift. However, the Permit Holder may be relieved by a relieving Permit Holder. Refer to Section 4.11 for more details on relief of Permit Holders.

The person to whom the Permit is issued (i.e. the Permit Holder) will normally be the person in charge of a work party. If only one person in the work party is required to work on or near the subject equipment, the Permit may be issued to that person.

The Permit Holder and all members of the work party shall sign onto the Personnel Register contained in the Permit booklet prior to commencing work, and shall sign off the Personnel Register on completion of a shift or prior to cancellation of the Permit. The responsibilities of the Permit Holder and of the work party members are set out in *PR D 78502 Substation Access Permits*.

An Electrical Permit to Work may also be issued to an Authorised Person (Substations), prior to that person issuing a Substation Access Permit, where required by *PR D 78500 Electrical Permits*. The special responsibilities and requirements that apply are set out in Section 16 of this document.

3.1. Requesting an Electrical Permit

The person in charge of the work party must determine if Electrical Permits are required, seeking advice from the electrical discipline if required.

The person in charge of the work party must complete and submit a Request for Electrical Permit to Work form if supply is to be removed, the equipment made safe and for an Electrical Permit to Work to be issued, for work to be carried out on or near any of the following:

- 1500V DC overhead wiring or cables: use form PR D 78501 FM11
- High Voltage (HV) aerial lines or cables: use form PR D 78501 FM12
- Low Voltage (LV): refer to PR D 78503 Low Voltage Access Permits.

In relation to other 1500V DC, HV or LV equipment, such as equipment in or associated with a Sydney Trains substation the person in charge of the work party should seek advice from the electrical discipline representative who will organise the appropriate Electrical Permit.

3.1.1. Request for 1500VDC Permit

The person preparing a Request for 1500VDC Permit must complete sections 1 to 6 of PR D 78501 FM11. Section 7 will be completed by the person issuing the Permit prior to the isolation.

At section 3, if the work entails the disconnection of traction bonds, traction return cables, or sections of track will be cut or welded the checkbox “...” should be ticked.

At section 4, the required extent of the safe work area must be defined by reference to OHW structure or termination numbers and the track numbers, as per 1500VDC Operating Diagrams. Words such as “All tracks” will not be accepted. If an early handback is required (e.g. to allow train preparation) prior to the end of a possession this should be stated.

Section 6 must be completed by an Authorised Officer Mains, indicating whether

- an onsite walkthrough has been conducted with an authorised person prior to the request, and/or
- an onsite walkthrough with an authorised person is required prior to the issue of a Permit.

3.1.2. Request for HV Permit

The person preparing a Request for HV Permit must complete sections 1 to 5 of PR D 78501 FM12. Section 7 will be completed by the person issuing the Permit prior to the isolation.

At section 4, the required extent of the safe work area must be defined by reference to the Feeder Numbers start and end location. “Sub to sub” will not be accepted.

Section 6: on-site walkthrough with an Authorised officer Mains is mandatory.

Section 8: Area allocated for a diagram or map of the work area.

3.2. Electrical Permit to Work Booklet

An Electrical Permit to Work Booklet is used for work on or near mains covered by a Working High Voltage Instruction (WHVI) or 1500V Authority.

Each Permit booklet contains the following items:

- a. 1 size A5 cover page, white in colour – this cover sheet provides useful information for both Permit Issuer and Permit Holder(s), including the need to know **all** members of the work party for every shift covered by the Permit;
- b. 1 original pink copy of the self-duplicating Permit (PR D 78501 FM05) itself, which shall not be removed;
- c. 1 Permit issuer’s copy, white in colour (PR D 78501 FM06), which shall be removed by the Permit Issuer; and
- d. A number of Personnel Registers bound with the Permit.

Permit booklets are available for up to 6 and 26 Personnel Registers. They are printed and assembled, by the TfNSW approved supplier, in accordance with *PR D 78703 Printing and Supply of Electrical Permit to Work Booklets*.

The booklet used for a particular job should be the one with the least number of Personnel Registers, with one Register for each shift to be worked.

4. General Requirements

4.1. Working High Voltage Instruction (WHVI) or Authority

An Electrical Permit shall be issued in accordance with one or more relevant WHVI's or Authorities, except as provided for in *SMS-06-GD-0268 Working around Electrical Equipment* in relation to abandoned cables or construction of new overhead lines under specified circumstances.

4.2. Inclusion of Low Voltage Aerial Lines

Where a LV aerial line has to be isolated and proved dead for the work, it shall be included on the Electrical Permit to Work. A separate Low Voltage Access Permit is not required.

4.3. Work Extending Into a Substation

Where work extends into a substation, a Substation Access Permit shall be issued for the portion of the work in the substation in accordance with the procedure detailed in procedure *PR D 78502 Substation Access Permit*.

Note: Refer to *PR D 78100 Definitions and Conventions for Electrical Safety* for the definition of a “substation”.

4.4. Construction of New 1500V Overhead Wiring

All 1500V Overhead Wiring under construction is to be treated as live, unless an Electrical Permit has been issued.

The Electrical Permit is to be marked with the words “WIRING UNDER CONSTRUCTION” and the issued Permits shall be consecutively numbered.

A register of Permits issued for construction work is kept by the Project Engineer in charge of the work.

When cancelled, the Permit Booklet shall be returned to the Project Engineer in charge of the work.

4.5. Additional Work

No work is to be carried out on or near the isolated equipment other than that specified in the Permit.

4.6. Deletions or Alterations

No deletions or alterations can be made to the work or operating details on the Permit once it has been issued, or the prospective Permit Holder has signed at item (7) “Approved Prospective Permit Holders”. Should it be necessary to vary the work specified after the Permit has been issued, the Permit shall be cancelled and a new Permit issued for the revised work.

Under no circumstances may Permits be photocopied prior to being cancelled.

4.7. Multiple Work Groups or Work Locations

Where a single person in charge can adequately and safely control the work to be undertaken, the person may hold a number of Permits. A separate Permit shall be issued for each:

- a. Work location, or
- b. Group of work locations.

In assessing if it is practicable for a single person to effectively supervise the work, the Permit Holder shall consider the:

- extent of the Electrically Safe Work Area,
- proximity of the electrical hazards,
- number of persons working under the Permit,
- physical separation of work locations, and
- mobility of the work process.

4.8. Personnel Registers

These are bound to the Permit booklet for all members of the work party, including the Permit Holder, to sign on and off, with one Personnel Register to be used per shift. Each Personnel Register forms part of the Permit.

4.9. Multiple Shifts

For work extending over several shifts, several prospective Permit Holders may be instructed and the Permit issued to one Permit Holder at the beginning of the first shift. The first shift Permit Holder is required to sign on both the pink Permit (item 8 “Received by Permit Holder”) and the first Personnel Register. Permit Holders of subsequent shifts are required to sign onto the respective Personnel Registers only. The Permit may then be transferred to other prospective Permit Holders for the subsequent shifts. This process can only be deployed if all the conditions below are confirmed prior to the commencement of each shift:

- a. The scope of work, including the location, extent and type of work remains unchanged.
- b. The Electrically Safe Work Area remains unchanged
- c. Only **one** Permit Holder is in charge of the Permit at any time.
- d. A separate Personnel Register is used for each shift.
- e. All members comprising the work party have been advised as required.
- f. No additional electrical hazards have been introduced to the work area.
- g. A procedure for the management of the Permit in between shifts is nominated by the Electrical Engineer/Manager for the project. The minimum requirement of such a procedure is contained within *PR D 78502 Substation Access Permits*.

If any of the above conditions cannot be met, the Permit shall be cancelled and then a new Electrical Permit to Work shall be issued for each shift.

At the beginning of each shift, the shift Permit Holder shall check and ensure that the previous shift Permit Holder has signed off the related Personnel Register.

The Permit Holder for the final shift, shall, in addition to signing off the Personnel Register, also sign off on item (8) "Returned by Permit Holder" of the pink Permit, declaring that the work has been totally completed and that the Permit is no longer required. This will enable the Permit to be cancelled and supply restored after all necessary checks and/or tests have been undertaken.

4.10. Worksite Traffic Management

Drivers of trucks delivering or removing material from site shall comply with the requirements of SMS-06-GD-3066 Guide to Managing Construction Hazards, in addition to the need for a Permit if required by Clause 8.1 of *SMS-06-GD-0268 Working around Electrical Equipment*.

4.11. Relief of Permit Holder

Relief of Permit Holders caters for unforeseen circumstances only, rather than normal change of shift.

- a. If the Permit Holder is to be replaced prior to the completion of a shift, the Permit Holder shall wait for the arrival of the relieving Permit Holder prior to signing off at the shaded area to the right of the sign-on area on the Personnel Register for the shift. The relieving Permit Holder signs on the shaded area below the original Permit Holder's sign-on area. All members of the work party shall be advised of the change of Permit Holder.
- b. If the Permit Holder shall leave the work location prior to the arrival of the relieving Permit Holder, all work shall stop and the Personnel Register for the shift shall be signed off by all work party members, including the leaving Permit Holder, and a new Personnel Register is to be used for the relieving Permit Holder.

The relieving Permit Holder shall have been instructed by an Authorised Person (refer Section 6) prior to taking over the holding of the Permit, refer Clause 7.2.

5. Details Specified on the Electrical Permit

The Electrical Permit specifies the:

- a. Permit Number
- b. Planned dates and times for the work – item (1)
- c. Location, extent and type of the work for which the Permit is required – item (2).
- d. The Person/Company/Work Team responsible for the work to be carried out – item (3).
- e. Details of electrically safe work areas – item (4). **Note:** All other exposed electrical equipment shall be considered **alive** and appropriate clearances maintained to this equipment unless another Permit has been issued for this equipment.
- f. Special instructions and/or warnings specified on the WHVI or Authority – item (5). The warnings on the Electrical Permit shall include warnings about any live equipment in the vicinity, such as live overhead wiring on adjacent tracks, live AC aerial lines owned by RailCorp or other electrical network operator, or live joint use circuits.
- g. Locations where all rail connections or earths are applied that are required for the Permit – item (6). All permanent and portable rail connections / earths shall be listed prior to the issue of the Permit. The tick boxes at the right are to be completed by the Permit issuer after ensuring that **all** required rail connections and/or earths have been applied. The 'Portable Rail Connection / Earthing Schedule' form (PR D 78501 FM02), a sample shown in Appendix A, is to be used for recording details of all applied portable rail connections / earths.
Note 1: The 'Portable Rail Connection / Earthing Schedule' form (PR D 78501 FM02) 'Portable Rail Connection / Earthing Schedule' is used to only record the portable rail connections / portable earths applied.
Note 2: All rail connections and portable rail connections applied by the operation of rail connection links or switches shall be recorded on the Permit.
Note 3: All earths and portable earths applied by the operation of earthing switches shall be recorded on the Permit.
- h. Checking before issue – item (8). The person writing items (1) to (6) of the Permit to be issued shall sign on the space provided. These items shall be checked and signed by an Authorised Person (Mains) who did **not** write the Permit.
- i. Prospective Permit Holders – item (7). Spaces are provided to record the names and signatures of all prospective Permit Holders who have been instructed by an Authorised Person in accordance with Section 8, together with the name and signature of the Authorised Person who instructed each prospective Permit Holder.
- j. Permit Issuer – item (8). This serves to record the name and signature of the Permit Issuer.
- k. Permit Holder – item (8). This serves to record the name and sign-on details of the Permit Holder for the first shift only. The Permit Holder is also required to sign on the first Personnel Register as well.
- l. Permit Cancellation – item (8) is used only after the work has been completed, or completion of the **final shift**, as signed off by the final shift Permit Holder. The signing off of all work party members and the Permit Holder, is provided on the Personnel Register for each shift, including the final shift.

6. Writing, Checking, Instructing, Issuing and Cancelling Permits

At least 2 Authorised Persons, i.e. an Authorised Traction Operator or Authorised Officer (Mains), shall be involved in the checking, instructing and issuing of a Permit.

The Electrical Permit to Work or Test Electrical Permit to Work may be written by either an Authorised or unauthorised person (e.g. an apprentice).

Only an Authorised Traction Operator or Authorised Officer (Mains) may:

- Check the written Permit and this person shall **not** be the person who wrote the Permit;
- Instruct Prospective Permit Holders;
Note: It is not necessary that the person who instructs the Permit Holder be the same person who will issue the Permit.
- Issue a Permit; or
- Cancel a Permit.

Notes:

- The person checking the written Permit or instructing prospective Permit Holders shall ensure that all relevant information including any special instructions and warnings on the WHVI and/or Authority is entered on the Permit. All information entered on the Permit in items 1 to 6, when implemented, would provide an Electrically Safe Work Area, as required for the work detailed on the Request for Electrical Permit to Work form.
- Refer to *PR D 78701 Personnel Certifications - Electrical* document for authorisation details.

7. Permit Holders

7.1. Eligible Persons

Permit Holders shall be persons who:

- a. Are Accredited Electrical Permit Holders – refer to *PR D 78701 Personnel Certifications – Electrical* document for more details.
- b. Have been instructed by an Authorised Person (refer Section 6) in accordance with Section 8 of this document.

7.2. Instruction of Permit Holders

Permit Holders may be instructed either at the worksite or at a pre-possession meeting (e.g. for planned weekend possessions or closedown which involves various work groups) prior to a Permit being issued.

The Project Manager or Engineer for planned possessions or closedowns shall request for the Electrical Permit to Work to be issued in accordance with *PR D 78502 Substation Access Permits*, and through the use of the form *PR D 78501 FM01 Request for Electrical Permit to Work*. There is provision in this form to put down the pre-numbered Permits to be issued. The Permits are to be pre-numbered in accordance with:

- Section 5.3 (b) of SMS-06-EN-0561 if issued under a WHVI, or
- Section 6.3 (b) of SMS-06-EN-0567 if issued under an Authority.

An on-site inspection is not required if written approval is obtained from the nominated Electrical Representative as indicated on *PR D 78501 FM01 Request for Electrical Permit to Work*. This nominated Electrical Representative making this decision shall be the relevant Authorised Officer (Mains) nominated by the District. The on-site inspection or instruction shall **not** be waived **unless** the following conditions are complied with:

1. There is no live electrical equipment in the vicinity, as specified under 'Special Instructions and Warnings' – item (5) of the Permit, and where appropriate;
2. Arrangements have been made specifically to ensure that **all** live exposed 1500V equipment that is within **300m** of the Permit is isolated and rail connected for the duration of the Permit.

Electrical Engineers and nominated Authorised Officers (Mains) are reminded that it is not adequate to assume condition 2) above is satisfied when, for example, all 1500V sections over an extended length of track are to be isolated and rail connected, such as during a closedown.

If Electrical Engineers and nominated Authorised Officer (Mains) decide to waive the on-site inspection by Permit Holders, then this shall be done by them after ensuring that adequate risk control measures are in place to control the risk of Condition 2) not being complied with. These measures shall include the listing on the Permit, for which on-site inspection has been waived, of the rail connections applied that ensures compliance with Condition 2).

If required, additional Permit Holders may be instructed in accordance with Section 8 of this document after work has commenced.

8. Responsibility of the Person Instructing Prospective Permit Holders

8.1. Preparation

The person instructing a prospective Permit Holder shall be authorised (refer Section 6) to issue a Permit and shall:

- a. Have an approved copy of the relevant WHVI and/or Authority, the Portable Rail Connection / Earthing Schedule and up-to-date Operating/Sectioning Diagrams, and
- b. Have the approval, as indicated on Item 7 of the completed PR D 78501 FM01 Request for Electrical Permit to Work form, by the relevant Authorised Officer (Mains) nominated by the District, if the instruction is not to be “on-site”, and
- c. Ensure that all relevant information including any special instructions and warnings on the WHVI and/or Authority is entered on the Permit. All information entered on the Permit in items 1 to 6, when implemented, would provide an electrically safe work area as required for the work detailed on the Request for Electrical Permit to Work form, and
- d. Ensure that the person to be instructed is an Accredited Electrical Permit Holder.

It is not necessary that the Authorised Person who instructed the Permit Holder be the same Authorised Person who will issue the Permit.

8.2. Instruction of Permit Holders – General

The Authorised Person (refer Section 6) instructing the prospective Permit Holders shall ensure that they understand:

- i. The planned date and time of work covered by the Permit;
- ii. The person in charge of the work, depot or company, and the contact phone number;
- iii. Which electrical equipment is covered by the Electrical Permit and is safe to work on or near;
- iv. Which electrical equipment shall be treated as live;
- v. Any special instructions and warnings on the Electrical Permit;
- vi. The obligation of the Permit Holder for the electrical safety of staff working under their control; and
- vii. The responsibilities set out on the reverse side of the Permit.

In addition, the instructing person should ask the following:

- If the Permit Holder is familiar with **all** members of the work party covered by the Permit
- The type of work to be carried out;
- What machinery (such as loaders, cranes, excavators etc.) will be utilised for the work;
- Where such machinery will gain access, to be set up or operate;
- Where will the spoil site be;
- How many people will be working per shift;
- How will the site be controlled (people and plant);

- If the prospective Permit Holders understand the electrically safe work area, and where earths and/or rail connections will be installed;
- Where they will keep the Permits between shifts;
- What they would do if the Permit is lost, and if the Permit Holder needs to leave the site during the course of work.

Note: For ready reference, the above requirements are listed under the 'Guidance Notes for On-Site Walk Through / Instructing Permit Holders' form on the reverse side of the front cover of each Permit booklet.

In the case of a Permit issued for 1500 volt OHW, there may be live HV over crossings above the electrically safe work area. See procedure SMS-06-EN-0567 - Appendix C, Vertical Extent of Electrically Safe Work Area.

The instructing person shall obtain an acknowledgment from the prospective Permit Holder that the work can be carried out:

- i. Safely within the Electrically Safe Work Area shown on the Permit, and
- ii. In accordance with the special instructions and warnings shown on the Permit.

The instructing person shall provide the prospective Permit Holder with any advice or assistance required in order for the prospective Permit Holder to make an informed assessment prior to giving the required acknowledgment.

The instructing person shall:

- a. Read items (1) through (6) of the Permit to the prospective Permit Holder, and, as each item is completed, require the prospective Permit Holder to give verbal confirmation that:
 - i. They have understood that item of the Permit, and
 - ii. The information in that item of the Permit matches the work that they are undertaking.
- b. Ensure that the prospective Permit Holder is aware of the time restrictions of the Permit.
- c. Ensure that the prospective Permit Holder prints their name and signs the Permit in the space(s) provided in item (7) of the Permit as an acknowledgment that items (1) to (6) of the Permit to be issued are understood.
- d. Then print their name and sign in the adjacent space(s) provided in acknowledgment of having instructed that Permit Holder.

8.3. Instruction of Permit Holder at a Meeting Prior to the Work

If the Permit Holder is being instructed at a meeting prior to the work, the instructing person shall ensure that:

- a. Items (1), (2), (3), (4), (5), (6) (except for the tick boxes at the right) of the Permit and (8 – Checked (Items 1 to 6) by) are completed before instructing commences,
- b. Item (7) shall be completed at the meeting,
- c. Items (6) (only the tick boxes), (8 – Issued by), (8 – Received by Permit Holder), (8 – Returned by Permit Holder) and (8 – Permit Cancelled by Authorised Person (Mains)) of the Electrical Permit are not completed at the meeting.
- d. The Permit is either pre-numbered at item (7) of the *PR D 78501 FM01 Request for Electrical Permit to Work* form, or will be numbered prior to the issue of the Permit, and
- e. The Permit booklet is retained and arrangements are made for it to be forwarded to the Authorised Person (Mains) for issue.

9. Responsibility of the Person Issuing the Permit

9.1. Preliminary Checks

The Authorised Person (refer Section 6) issuing the Permit shall ensure that:

- a. All relevant information including any special instructions and warnings on the WHVI and/or Authority is entered on the Permit, and check that the information is clearly legible on the Permit issuer's copy (self-duplicating).
- b. The person in charge of the WHVI and/or Authority has:
 - i. Confirmed that the specified high and low voltage overhead lines or cables have been isolated and safety earths applied as required.
 - ii. Confirmed that the specified sections/subsections of the 1500 OHW system have been isolated and has advised the locations of the associated rail connections.
 - iii. Confirmed that other Electrical Network Operator's services where involved have been isolated and earthed as required and an Operating Agreement has been received.
 - iv. Advised the Permit number.
- c. The Permit is correctly numbered.
- d. The **working earths** for the specified HV overhead lines or cables are in place at each side of the work site. The person issuing the Permit shall visually check at least one set.
- e. All 1500 volt equipment covered by the Permit is rail connected. This shall be done:
 - i. by visually tracing to at least one set of rail connections for each section / subsection, or
 - ii. by personally using a LR tester, or
 - iii. by personally using a Hivotech OHW Tester to test dead, or
 - iv. in circumstances as approved in writing by the Authorised Officer (Mains) in the area concerned, by reference to a signed *PR D 78501 FM02 Portable Rail Connecting / Earthing Schedule*, stating the locations of the rail connections applied for a closedown of extended length and/or duration and

unchanging power out configuration with the exception of the electrical sections / subsections adjacent to the live sections at the extremities of the closedown where LR testing or visual tracing to a set of rail connections is mandatory.

- f. The Prospective Permit Holders listed at Item (7) of the Permit concerned are all Accredited Electrical Permit Holders.
- g. The locations of the relevant earths and/or rail connections as listed in item (6) on the Permit has been checked applied and ticked off in the boxes provided at the right.

9.2. Issuing of Electrical Permit

The Authorised Person (refer Section 6) issuing the Permit shall then:

- a. Make the Permit “in force” by writing their name, signing in the space provided and entering the time and date “in force” and issue the Permit.
- b. Ensure that the Permit Holder understands all details entered into items (1) to (6) of the Permit prior to writing their name and signing on the Permit in acknowledgment and acceptance of the associated responsibilities.
- c. Confirm the details of the Permit with the Authorised Person (Mains) in charge of the WHVI or Authority.

It is not necessary that the person issuing the Permit be the same person who instructed the Permit Holder.

The person issuing the Permit shall advise the person holding the Authority or WHVI so that they can record the issue of any Permit on the back of the Authority and/or WHVI. If the Permit is issued against multiple Authority's and/or WHVI's, the record of issue shall be indicated on **all** associated Authority's and/or WHVI's.

The person issuing the Permit is not required to remain in the vicinity of the work unless holding the Permit.

The responsibilities of the Permit Holder and the persons in the work party are set out in *PR D 78502 Substation Access Permits*.

10. Return of the Permit

The Permit Holder is required to return the Permit to an Authorised Person (refer Section 6) retrieving and cancelling the Permit or, in the case of 1500V construction work where an Authority has not been issued, to the Electrical Project Engineer. The Authorised Person (refer Section 6) or Electrical Project Engineer shall check and ensure that the Permit Holder and all members of the work party have signed off before allowing the Permit Holder to leave the work site.

Note: The practicality of returning a Permit is to be managed at the local level by the relevant regional electrical engineer. The agreed procedure is for the Permit Holder to return the Permit personally to the Authorised Person (Mains) retrieving the Permit so that the ‘Preliminary Checks’ of Clause 11.1 can be completed with the Permit Holder present.

11. Responsibility of the Person Cancelling the Permit

11.1. Preliminary Checks When Retrieving the Permit

Prior to cancelling the Permit, the Authorised Person (refer Section 6) retrieving the Permit shall:

- a. Check that the Permit Holder has certified that the Permit may be cancelled, and
- b. Check that all persons signed on to the Permit or Personnel Registers have signed off, and
- c. If it appears that any work party member may not have signed off, confirm that the Permit Holder:
 - Has made reasonable attempts to check that any person failing to sign off has left the work site and it is impracticable to get them back for signing off;
 - Accepts responsibility for that person, and an appropriate notation shall be made on the Personnel Register.

The Permit Holder is required to undertake a joint site inspection with the Person retrieving the Permit or nominated Authorised Person (Mains) to ensure that all persons, tools and machinery are outside the minimum Safe Approach Distance for safe energisation of supply.

- d. If the Permit Holder has not signed off and/or already left the work site and is not reasonably practicable for them to return to sign off the Permit, then the Person retrieving the Permit or nominated Authorised Person has to undertake a site inspection to ensure that all persons, tools and machinery are outside the minimum Safe Approach Distance for safe energisation of supply.
- e. In the case of incident (c) or (d) above, report the incident to Sydney Trains Safety Incident and Injury Hotline 1800 772 779, the ESO and the person in charge of the WHVI/Authority.
- f. Check that the electrical equipment for which the Permit was issued has been inspected, tested if required, and is safe to be energised.
- g. In the case of incident (c) or (d) above, report the incident to the relevant Authorised Officer (Mains) who shall suspend the Permit Holder's authorisation to hold Permits in accordance with Clause 7 'Suspension and withdrawal of authorisation' of *PR D 78701 Personnel Certifications – Electrical*.

11.2. Cancellation of the Electrical Permit

Once the preliminary checks have been satisfactorily completed, the Authorised Person (refer Section 6) cancelling the Permit shall:

- a. Ensure that the Permit Holder of the final shift has, in addition to signing off the final shift Personnel Register, also signed off item (8) of the pink Permit and certified that the work has been completed and the Permit is no longer required.
- b. Cancel the original copy of the Permit by signing in the space provided and entering the time and date.
- c. Ensure that the person in charge of the WHVI and/or Authority is advised that the Permit has been cancelled.
- d. Forward the cancelled Permit to the nominated Electrical Engineer or electrical representative in the area concerned.

It is not necessary for the white copy of the Permit to be placed back in the Permit booklet.

11.3. Removal of Working Earths and/or Portable Rail Connections

Working earths and/or portable rail connections shall not be removed:

- a. Without first checking with the person in charge of the WHVI and/or Authority, and
- b. If the said working earths and/or portable rail connections are protecting work being carried out on other Permits or Operating Agreements.

Note: Where overlapping Authorities exist, as indicated on the completed *PR D 78501 FM02 Portable Rail Connection / Earthing Schedule*, the portable rail connections applied in the overlapping areas shall not be removed without the approval of the Authority Holders for each of the overlapping Authorities concerned.

12. Test Electrical Permit to Work

12.1. Application

When it is necessary to remove earths or rail connections to enable test equipment to be used, a Test Electrical Permit shall be issued.

The following work may be carried out on the Test Electrical Permit to Work:

- a. Connection and disconnection of the test equipment, and
- b. Adjustment of the test equipment.

This work shall be carried out with the electrical equipment earthed or rail connected unless it is carried out in a manner that does not require persons to come within the Safe Approach Distance of the electrical equipment.

12.2. Special Requirements

The electrical equipment to be tested shall be isolated and earthed or rail connected in accordance with the relevant WHVI and/or Authority prior to the issue of the Test Electrical Permit to Work.

Warning

Equipment capacitance can result in a dangerous voltage remaining on the equipment after the test equipment has been turned off.

The equipment shall be discharged to earth at the conclusion of the test, prior to persons coming within the electrical Safe Approach Distances.

Whilst the Test Electrical Permit to Work is current:

- a. The earths or rail connections shall only be removed for the duration of the test.
- b. The equipment shall remain isolated.
- c. All other Permits associated with the WHVI or Authority shall be cancelled prior to the Test Electrical Permit to Work being issued.
- d. The WHVI or Authority does not need to be cancelled.

All conditions applicable to an Electrical Permit to Work, other than the removal of earths or rail connections, apply to the Test Electrical Permit to Work.

12.3. Form

The Electrical Permit to Work form, refer PR D 78501 FM05, shall be used with the word "TEST" written in front of the title. See Appendix D for a sample of a completed Test Electrical Permit to Work.

12.4. Electrical Safe Approach Distances

During the period for which earths or rail connections are removed, all persons shall remain outside of the required Safe Approach Distance from the electrical equipment. The required distance is the greater of that prescribed in *SMS-06-GD-0268 Working around Electrical Equipment* for:

- a. The nominal equipment operating voltage, and
- b. The test voltage.

12.5. Buffer Sections

A "buffer section" of rail connected 1500 Volt Overhead Wires (OHV), between the live OHV and the section of OHV being tested, shall be used to protect against:

- a. Leakage across section insulators and insulated knuckles, and
- b. Danger from pantographs bridging live to dead sections.

If practicable, in the case of HV equipment, a "buffer section" of earthed equipment should be used for additional safety.

12.6. Person Holding a WHVI and/or Authority for a Test Electrical Permit to Work

In accordance with PR D 78701 Personnel Certifications – Electrical, the person holding a WHVI and/or Authority for a Test Electrical Permit to Work shall be:

- an Authorised Officer (Mains) specifically authorised to do so, and an
- Electrical Engineer (see *PR D 78100 Definitions and Conventions for Electrical Safety* for definition) or Authorised Officer (Substations).

The person in charge of the WHVI and/or Authority shall:

- a. Be in charge of all current WHVI's and Authority's covering the electrical equipment which is being tested, and
- b. Prior to the issuing of the Test Electrical Permit to Work, check with the person carrying out the tests:
 - i. The details of tests to be carried out, and
 - ii. The isolation and earthing or rail connecting arrangements.
- c. Ensure that no other Electrical Permit is in force for the electrical equipment being tested during the currency of the Test Electrical Permit to Work, except as provided for in section 12.8, and
- d. Be present during the tests to ensure that the agreed arrangements are followed, and
- e. Authorise the removal and replacement of working and safety earths or rail connections when required, in co-ordination with the Electrical System Operator.

12.7. Person Carrying Out the Test

The person carrying out the tests shall have sufficient knowledge of the test procedures and is responsible for ensuring that the testing is carried out safely.

12.8. Testing a Cable or Overhead Line From Within a Substation

Where the testing is carried out on a HV overhead line or cable and the test is conducted from within a substation, a Test Substation Access Permit shall be issued in accordance with procedure *PR D 78502 Substation Access Permit* in lieu of a Test Electrical Permit to Work.

If a WHVI is current for the HV overhead line or cable under test, a Test Electrical Permit to Work shall be issued in accordance with section 16 to the person issuing the Test Substation Access Permit.

A Test Electrical Permit shall be issued in accordance with section 16, to the person issuing the Test Substation Access Permit to Work, when the testing is carried out on 1500 volt equipment that:

- a. Cannot be isolated from the 1500 volt overhead wiring, and
- b. The test is conducted from within a substation.

13. Use of Work Area Markers

Markers will not be placed by the person issuing the Permit to define the limits of the electrical safe working area. This does not preclude the use of markers by the Permit Holder to assist in the control of the work process.

14. Loss of an Electrical Permit to Work Booklet

If the Permit booklet is lost, the Permit Holder shall immediately report the loss to one of the following:

- a. The person who issued the Permit, or
- b. The person who will cancel the Permit, or
- c. The Electrical System Operator.

14.1. Loss of Permit with Work still in Progress

An Authorised Person (refer Section 6) shall issue a duplicate Permit with the same number. The duplicate Permit shall be endorsed "Replacement for Lost Permit". The Authorised Person (refer Section 6) shall instruct the Permit Holder to ensure that all persons still engaged in the work sign onto the Personnel Register of the duplicate Permit booklet. The Authorised Person (refer Section 6) shall also ensure that the loss and replacement action is recorded on the back of the WHVI and/or Authority.

14.2. Work Already Completed and Replacement Permit not Issued

The Authorised Person (refer Section 6) who would have cancelled the Permit shall obtain written notification from the Permit Holder that:

- a. All persons and material are clear of all electrical equipment for which the Permit was issued, and
- b. All persons who signed on to the original Permit have been instructed to treat the equipment as live.

If the Permit issuer's white copy of the Permit is available, written notification may be provided by making a notation on the white copy stating that:

- a. The original Permit booklet has been lost, and
- b. As far as practicable, all persons signed on to the original Permit have been contacted and told that it is no longer safe to work at the locations covered by the Permit.

15. Associating Electrical Permits with Several WHVI's and/or Authorities

15.1. Relevant Situations

If the work requires several HV overhead lines or cables to be isolated, and to facilitate staging they are isolated on a number of separate WHVI's, then a single Permit may be issued. This Permit shall be linked to all WHVI's involved, and shall not be issued until the relevant equipment has been isolated and earthed in accordance with all the WHVI's involved.

If the work requires several sections/subsections of the 1500V OHW to be isolated, and to facilitate staging they are isolated on a number of separate Authorities, then a single Permit may be issued. This Permit shall be linked to all Authorities involved and shall not be issued until the relevant equipment has been isolated and rail connected in accordance with all the Authorities involved.

If the work requires isolation of both HV overhead lines or cables, and sections /subsections of the 1500V OHW, then a single Permit may be issued. This Permit shall be linked to all WHVI's and Authorities involved, and shall not be issued until the relevant equipment has been isolated and earthed or rail connected in accordance with all the WHVI's and Authorities involved.

15.2. Numbering of Permits

In order to link the Permit to a number of WHVI's and/or Authority's, the Permit shall be given a composite number. The person in charge of each WHVI or Authority shall allocate a Permit number for each WHVI or Authority. The person issuing the Permit shall then number the Permit using all of these numbers, each linked together using the "&" symbol.

An example of such a number is "123/1 & T456/96/1".

The details of the Permit shall then be entered on the reverse side of each WHVI or Authority using the composite Permit number.

16. Electrical Permit Issued for the Purpose of Issuing a Substation Access Permit

In accordance with procedure *PD R 78500 Electrical Permits*, an Electrical Permit to Work may be issued to an Authorised Person (Substations) for the purpose of issuing a Substation Access Permit. No work may be carried out on an Electrical Permit to Work issued in this way; it can only be used as a permission to issue a Substation Access Permit for the work. All the normal conditions of the Substation Access Permit apply.

The following special requirements and responsibilities apply to the issue of the Electrical Permit.

16.1. Details Shown on the Permit

When completing the Electrical Permit:

- a. At item (4) “Details of the Electrically Safe Work Area”, write: “See Substation Access Permit”, and
- b. At item (5) “Special Instructions and Warnings”, write: “For issue of Substation Access Permit at (name of substation) only” (modifies item 5).

16.2. Instruction of the Permit Holder (Person Issuing the Substation Access Permit)

Contrary to section 7.2 of this document, the Permit Holder (Authorised Person (Substations) issuing the Substation Access Permit) does not need to be instructed on site and no written approval from the Electrical Engineer is required for this.

Contrary to section 8, the Authorised Person (refer Section 6) instructing the Prospective Permit Holder does not need to obtain acknowledgment that:

- a. The work can be carried out safely within the shown on the Permit, and
- b. In accordance with the special instructions and warnings shown on the Electrical Permit.

16.3. Test Electrical Permit to Work

The requirements of section 16 also apply for situations that require the issue of a Test Electrical Permit to Work to the person issuing a Test Substation Access Permit. (See section 12.8).

17. References

- PR D 78100 Definitions and Conventions for Electrical Safety
- PR D 78202 Working High Voltage Instruction
- PR D 78302 Authority for Removal of Supply from 1500V Sections
- PR D 78500 Electrical Permits
- PR D 78501 FM 05 Electrical permit to Work (Do not remove from Booklet)
- PR D 78502 Substation Access Permit
- PR D 78503 Low Voltage Access Permits
- PR D 78501 FM01 Request for Electrical Permit to Work
- PR D 78501 FM07 6 Personnel Registers
- PR D 78501 FM08 26 Personnel Registers
- PR D 78501 FM02 Portable Rail Connection / Earthing Schedule
- PR D 78501 FM03 6 Personnel Registers Cover
- PR D 78501 FM04 26 Personnel Registers Cover
- PR D 78501 FM06 Electrical Permit to Work (To be removed by Permit Issuer)
- PR D 78700 Working around Electrical Equipment
- SMS-06-GD-3066 Guide to Managing Construction Hazards
- PR D 78703 Printing and Supply of Electrical Permit to Work booklets
- PR D 78701 Personnel Certifications – Electrical

18. Appendices

Appendix A Portable Rail Connection/Earthing Schedule

This Appendix shows a sample of completed Rail Connection/Earthing Schedule.

Appendix B Sample Permit - WHVI Isolation

This Appendix shows a sample of a completed Permit associated with a WHVI isolation, and the attached Personnel Register illustrating the Permit Holder accepting the responsibility for a member of the work party who has failed to sign off.

Appendix C Sample Permit - Authority Isolation

This Appendix shows a sample of a completed Permit, and the attached Personnel Register illustrating Permit Holder Relief.

Appendix D Sample "Test Electrical Permit to Work" – WHVI Isolation

This Appendix shows a sample of a completed Test Electrical Permit to Work, and the attached Personnel Register.

Appendix B Sample "Electrical Permit to Work" – WHVI Isolation

Electrical Permit to Work

No. T423/2015/1

THIS PERMIT SHALL ONLY BE HELD BY AN ACCREDITED ELECTRICAL PERMIT HOLDER WHO HAS BEEN INSTRUCTED BY AN AUTHORISED PERSON (MAINS) AS TO THE ELECTRICALLY SAFE WORK AREA AND CONDITIONS OF THIS PERMIT.

1. FROM : **9:30** hours **18/02/2015** TO: **13:00** hours **18/02/2015**

2. LOCATION, EXTENT AND TYPE OF WORK: (including Plant) : **TASCOTT**
On 671/2 11kV feeder between Pole 39 and Pole 49, Gum Tree Services will be lopping trees using travel towers

3. FOR WORK TO BE CARRIED OUT BY: **Gum Tree Services**
(Company/Work Team name)

4. DETAILS OF THE ELECTRICALLY SAFE WORK AREA: **From Pole 39 to Pole 49 on 671/2 11kV feeder**
(Limit this to worksite and specify pole numbers, tracks, OHV structure numbers, and other details)

Do not remove
from booklet

NB: All other exposed electrical equipment shall be considered as alive and appropriate clearances maintained.

5. SPECIAL INSTRUCTIONS AND WARNINGS :

6. SECTION / SUBSECTION / HIGH VOLTAGE AERIAL LINE / CABLE REQUIRING RAIL CONNECTIONS OR EARTHS	LOCATION OF RAIL CONNECTIONS / WORKING EARTHS (TICK BOXES ON RIGHT TO BE COMPLETED BY PERMIT ISSUER)	Applied
671/2 11kV feeder	1 Pole 38	<input checked="" type="checkbox"/>
	2 Pole 50	<input checked="" type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

7. ACCREDITED ELECTRICAL PERMIT HOLDERS SIGNING THIS SECTION ACKNOWLEDGE THEY HAVE BEEN SHOWN AND UNDERSTAND THE DETAILS OF THE ELECTRICALLY SAFE WORK AREA AND SPECIAL INSTRUCTIONS & WARNINGS (Items 4 and 5 above) FOR WHICH THE PERMIT WILL BE ISSUED.

APPROVED PROSPECTIVE PERMIT HOLDERS			INSTRUCTED BY AUTHORISED PERSON (MAINS)	
NAME	SIGNATURE	MOBILE	NAME	SIGNATURE
a) R BAKER	R BAKER	0412345678	M LOGAN	M LOGAN
b)				
c)				
d)				
e)				
f)				
g)				
h)				

8. THIS PERMIT IS:	NAME	SIGNATURE	HOURS	DATE
CHECKED (Items 1 to 6) BY	M LOGAN	M LOGAN	8:30	18/02/2015
ISSUED BY	M LOGAN	M LOGAN	9:30	18/02/2015
RECEIVED BY PERMIT HOLDER	R BAKER	R BAKER	9:30	18/02/2015
RETURNED BY PERMIT HOLDER	R BAKER	R BAKER	12:45	18/02/2015
PERMIT CANCELLED BY AUTHORISED PERSON (MAINS)	M LOGAN	M LOGAN	13:00	18/02/2015

Personnel Register No. 1

FROM: hours TO: hours

PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF
R BAKER	R BAKER	9:35		:
RELIEVING PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF
		:		:

Members of the working party acknowledgement (See Instructions Part B on the reverse side of the pink Permit)

PRINT NAME	MOBILE PH.	SIGN ON	SIGN OFF	TIME OFF
1 R BAKER	0412345678	9:35	R BAKER	12:45
2 J BLOGG	0412345677	9:35	J BLOGG	12:45
3 G FISHING	0412345676	9:35		
4				
5				
6				
7				
8				
9				
10				
11				
12				
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28				

SAMPLE

I certify that **ALL** persons and material are clear of the electrical equipment to be re-energised, and **EITHER**

I also certify that all persons who have previously signed "ON", have signed "OFF" this Personnel Register, and that all have been instructed to treat the equipment as LIVE.

OR

1. I also certify that amongst those persons (as indicated above) who have failed to sign "OFF", I have made reasonable attempts to contact and check that any person failing to sign off has left the work site and it is impracticable to get them back for signing off, **AND**
 2. I accept responsibility for all those persons who have failed to sign "OFF", and I have undertaken a joint site inspection with the person retrieving the Permit to ensure that all persons, tools, plant and materials are outside the required minimum Safe Approach Distance from exposed electrical equipment for their safe energisation.

PERMIT HOLDER NAME	SIGN OFF	TIME OFF
R BAKER	R BAKER	12:45

Appendix C Sample "Electrical Permit to Work" – Authority Isolation

Electrical Permit to Work No. **503/09/1**

THIS PERMIT SHALL ONLY BE HELD BY AN ACCREDITED ELECTRICAL PERMIT HOLDER WHO HAS BEEN INSTRUCTED BY AN AUTHORISED PERSON (MAINS) AS TO THE ELECTRICALLY SAFE WORK AREA AND CONDITIONS OF THIS PERMIT.

1. FROM : **9:00** hours **15/02/2015** TO: **20:00** hours **15/02/2015**

2. LOCATION, EXTENT AND TYPE OF WORK: (including Plant) :
HANDS ON INSPECTION OVER UP AND DOWN ILLAWARRA LOCAL
SI INSPECTION BETWEEN UP AND DOWN ILLAWARRA LOCAL USING ROAD/RAIL PLANT

3. FOR WORK TO BE CARRIED OUT BY: **SYDNEHAM NETWORK BASE**
(Company/Work Team name)

4. DETAILS OF THE ELECTRICALLY SAFE WORK AREA:
(Limit this to worksite and specify pole numbers, tracks, OHW structure numbers, and other details)
SW5+500 TO SW5+800 UP & DOWN ILLAWARRA LOCAL

NB: All other exposed electrical equipment shall be considered as alive and appropriate clearances maintained.

5. SPECIAL INSTRUCTIONS AND WARNINGS :

6. SECTION / SUBSECTION / HIGH VOLTAGE AERIAL LINE / CABLE REQUIRING RAIL CONNECTIONS OR EARTHS	LOCATION OF RAIL CONNECTIONS / WORKING EARTHS (TICK BOXES ON RIGHT TO BE COMPLETED BY PERMIT ISSUER)	Applied
31/1C	MEEKS ROAD SS	<input checked="" type="checkbox"/>
32/1C	MEEKS ROAD SS	<input checked="" type="checkbox"/>
31/1B	SW4+646	<input checked="" type="checkbox"/>
32/1B	SW4+646	<input checked="" type="checkbox"/>
202/1A	B5+881	<input checked="" type="checkbox"/>
201/1A	B5+881	<input checked="" type="checkbox"/>

7. ACCREDITED ELECTRICAL PERMIT HOLDERS SIGNING THIS SECTION ACKNOWLEDGE THEY HAVE BEEN SHOWN AND UNDERSTAND THE DETAILS OF THE ELECTRICALLY SAFE WORK AREA AND SPECIAL INSTRUCTIONS & WARNINGS (Items 4 and 5 above) FOR WHICH THE PERMIT WILL BE ISSUED.

APPROVED PROSPECTIVE PERMIT HOLDERS			INSTRUCTED BY AUTHORISED PERSON (MAINS)	
NAME	SIGNATURE	MOBILE	NAME	SIGNATURE
a) J WILSON	J WILSON	0412345678	M BROWN	M BROWN
b)				
c)				
d)				
e)				
f)				
g)				
h)				

SAMPLE

8. THIS PERMIT IS:	NAME	SIGNATURE	HOURS	DATE
CHECKED (Items 1 to 6) BY	M GAUCI	M GAUCI	7:30	15/02/2015
ISSUED BY	M BROWN	M BROWN	9:30	15/02/2015
RECEIVED BY PERMIT HOLDER	J WILSON	J WILSON	9:30	15/02/2015
RETURNED BY PERMIT HOLDER	D HARDY	D HARDY	19:00	15/02/2015
PERMIT CANCELLED BY AUTHORISED PERSON (MAINS)	M BROWN	M BROWN	19:00	15/02/2015

Personnel Register No. 1

FROM: hours TO: hours

PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF
J WILSON	J WILSON	9:00	J WILSON	12:00
RELIEVING PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF
D HARDY	D HARDY	12:00	D HARDY	19:00

Members of the working party acknowledgement (See Instructions Part B on the reverse side of the pink Permit)

PRINT NAME	MOBILE PH.	SIGN ON	SIGN OFF	TIME OFF
1 E MEAD	0412345678	E MEAD	E MEAD	18:45
2 J BLOGG	0412345677	J BLOGG	J BLOGG	18:45
3				
4				
5				
6				
7				
8				
9				
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SAMPLE

I certify that **ALL** persons and material are clear of the electrical equipment to be re-energised, and EITHER

I also certify that all persons who have previously signed "ON", have signed "OFF" this Personnel Register, and that all have been instructed to treat the equipment as LIVE.

OR

1. I also certify that amongst those persons (as indicated above) who have failed to sign "OFF", I have made reasonable attempts to contact and check that any person failing to sign off has left the work site and it is impracticable to get them back for signing off, **AND**
 2. I accept responsibility for all those persons who have failed to sign "OFF", and I have undertaken a joint site inspection with the person retrieving the Permit to ensure that all persons, tools, plant and materials are outside the required minimum Safe Approach Distance from exposed electrical equipment for their safe energisation.

PERMIT HOLDER NAME	SIGN OFF	TIME OFF
D HARDY	D HARDY	19:00

Appendix D Sample "Test Electrical Permit to Work"

TEST Electrical Permit to Work

No. **T423/2015/3**

THIS PERMIT SHALL ONLY BE HELD BY AN ACCREDITED ELECTRICAL PERMIT HOLDER WHO HAS BEEN INSTRUCTED BY AN AUTHORISED PERSON (MAINS) AS TO THE ELECTRICALLY SAFE WORK AREA AND CONDITIONS OF THIS PERMIT.

1. FROM : **13:00** hours **18/02/2015** TO: **16:00** hours **18/02/2015**

2. LOCATION, EXTENT AND TYPE OF WORK: (including Plant) :
On 671/2 11kV feeder between Pole 81 and Pole 82, Megger test 11 kV cable

3. FOR WORK TO BE CARRIED OUT BY: **Major Works, Strathfield**
(Company/Work Team name)

4. DETAILS OF THE ELECTRICALLY SAFE WORK AREA:
(Limit this to worksite and specify pole numbers, tracks, OHV structure numbers, and other details)
From Pole 81 to Pole 83 on 671/2 11kV feeder

NB: All other exposed electrical equipment shall be considered as alive and appropriate clearances maintained.

5. SPECIAL INSTRUCTIONS AND WARNINGS :

6. SECTION / SUBSECTION / HIGH VOLTAGE AERIAL LINE / CABLE REQUIRING RAIL CONNECTIONS OR EARTHS	LOCATION OF RAIL CONNECTIONS / WORKING EARTHS (TICK BOXES ON RIGHT TO BE COMPLETED BY PERMIT ISSUER)	Applied
Refer to Section 5 above		

7. ACCREDITED ELECTRICAL PERMIT HOLDERS SIGNING THIS SECTION ACKNOWLEDGE THEY HAVE BEEN SHOWN AND UNDERSTAND THE DETAILS OF THE ELECTRICALLY SAFE WORK AREA AND SPECIAL INSTRUCTIONS & WARNINGS (Items 4 and 5 above) FOR WHICH THE PERMIT WILL BE ISSUED.

APPROVED PROSPECTIVE PERMIT HOLDERS			INSTRUCTED BY AUTHORISED PERSON (MAINS)	
NAME	SIGNATURE	MOBILE	NAME	SIGNATURE
a) M LOGAN	M LOGAN	0412345678	M LOGAN	M LOGAN
b)				
c)				
d)				
e)				
f)				
g)				
h)				

8. THIS PERMIT IS:	NAME	SIGNATURE	HOURS	DATE
CHECKED (Items 1 to 6) BY	M LOGAN	M LOGAN	12:45	18/02/2015
ISSUED BY	M LOGAN	M LOGAN	13:00	18/02/2015
RECEIVED BY PERMIT HOLDER	M LOGAN	M LOGAN	15:00	18/02/2015
RETURNED BY PERMIT HOLDER	M LOGAN	M LOGAN	15:00	18/02/2015
PERMIT CANCELLED BY AUTHORISED PERSON (MAINS)	M LOGAN	M LOGAN	15:00	18/02/2015

Personnel Register No. 1

FROM: hours TO: hours

PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF
M LOGAN	M LOGAN	13:00		
RELIEVING PERMIT HOLDER NAME	SIGN ON	TIME ON	SIGN OFF	TIME OFF

Members of the working party acknowledgement (See Instructions Part B on the reverse side of the pink Permit)

PRINT NAME	MOBILE PH.	SIGN ON	SIGN OFF	TIME OFF
1 R BAKER	0412345678	R BAKER	R BAKER	15:00
2 J BLOGG	0412345677	J BLOGG	J BLOGG	15:00
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SAMPLE

I certify that **ALL** persons and material are clear of the electrical equipment to be re-energised, and **EITHER**

I also certify that all persons who have previously signed "ON", have signed "OFF" this Personnel Register, and that all have been instructed to treat the equipment as LIVE.

OR

1. I also certify that amongst those persons (as indicated above) who have failed to sign "OFF", I have made reasonable attempts to contact and check that any person failing to sign off has left the work site and it is impracticable to get them back for signing off, **AND**
 2. I accept responsibility for all those persons who have failed to sign "OFF", and I have undertaken a joint site inspection with the person retrieving the Permit to ensure that all persons, tools, plant and materials are outside the required minimum Safe Approach Distance from exposed electrical equipment for their safe energisation.

PERMIT HOLDER NAME	SIGN OFF	TIME OFF
M LOGAN	M LOGAN	15:00