

Electricity – Live Work Policy

Updated: 17 August 2017

Aim: To protect our workers and anyone else impacted by our work from the risk of electric shock and/or arc flash

Approval to carry out live work must be given by DNA Electrical manager prior to carrying out the live work.

Note: No DNA Electrical staff member shall carry out live work on currents exceeding 400A

Working on or near* exposed energized conductors or live conductive parts, shall be considered only when an adequate risk assessment indicates....

- 1) The work is necessary in the interest of safety and the risk of harm would be greater than working de-energized;**

Prior to working live following steps must be carried out:

- 1) Carry out Live Work Risk Assessment Form and submit to manager for approval. See link for this form. This form can be made available on SmartTrade Mobile.
 - a. Electrician is to access this form on SmartTrade Mobile (the form can be fetched or the office can be contacted to add the form to the job)
 - b. Live Work Risk Assessment form to be confirmed
 - c. Manager to review form on the job in SmartTrade (if out of the office, office staff can e-mail PDF)
 - d. Manager to advise Electrician whether approval is given, or not given, for live work. A note to be inserted into job on SmartTrade by manager advising whether approval given or not for live work
- 2) Unless you can barricade the area there must be a safety observer on site (for example a further staff member from DNA Electrical)
- 3) Live work can **ONLY** be carried out by a competent person. This shall be deemed to be a Registered Electrician or Registered Electrical Inspector who in themselves feels they are competent to carry out the live work.
- 4) Appropriate PPE shall be used. Refer DNA Electricals' Safe Use of PPE Policy
 - a. Currents up to and including 100A
 - i. Rubber soled safety boots
 - ii. Long Sleeved Cotton Overalls with sleeves down, collar up, top buttons done up
 - iii. Safety Glasses
 - iv. Insulating gloves

- v. Other PPE may be required depending on the risk assessment. Refer table 9.2 from AS/NZS4836:2001 below
 - b. Currents exceeding 100A up to and including 400A
 - i. Rubber soled safety boots
 - ii. Long Sleeved Cotton Overalls with sleeves down, collar up, top buttons done up
 - iii. Safety Glasses
 - iv. Safety Helmet (Hard Hat)
 - v. Insulating gloves
 - vi. Other PPE may be required depending on the risk assessment. Refer table 9.2 from AS/NZS4836:2001 below
 - vii. IMPORTANT NOTE: Bracelets, rings neck chains, exposed metal zips, watches and other conductive items shall not be worn while working on or near exposed energized conductors or live conductive parts.
- 5) Work must be carried out from a stable work position
- 6) Only properly insulated tools shall be used
- a. Conductive items such as tape measures, rules, reinforced tapes, ladders, elevating work platforms, scaffolding and guards on portable lamps, shall NOT be used on or near exposed energized conductors or live conductive parts.
- 7) If the live equipment you are working on has earthed metal, precautions shall be taken to ensure earthing continuity is always maintained to any component of the electrical equipment at all times. If this is not possible temporary protective earthing conductors may be required
- 8) Only conductors at the same voltage should be worked on at any one time. Insulating barriers, covers or mats shall be used in the work area between conductors of different phases or voltage
- a. If you are in this situation contact your manager so we can source the appropriate barriers (refer AS/NZS4836:2011 section 3.5(c)(ix))

TABLE 9.2
GUIDE TO THE SELECTION OF PERSONAL PROTECTIVE EQUIPMENT

TASK	CURRENTS UP TO AND INCLUDING 100 A	CURRENT EXCEEDING 100 A AND UP TO AND INCLUDING 400 A	CURRENTS EXCEEDING 400 A
Work (isolated and verified)	Footwear Protective clothing (if required) Eye protection (if required) Gloves (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)	Footwear Protective clothing (if required) Eye protection (if required) Gloves (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)	Footwear Protective clothing (if required) Eye protection (if required) Gloves (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)
Switching, isolating, removing fuses or links	Footwear Protective clothing Eye protection Gloves (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)	Footwear Protective clothing Eye protection Gloves Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)	Footwear Protective clothing Eye protection Gloves Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)
Isolation verification, testing or fault finding	Footwear Protective clothing Eye protection Gloves Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)	Footwear Protective clothing* Eye protection Gloves Arc flash suit and hood (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required) Face shield (if required)	Footwear Protective clothing* Eye protection Gloves Face shield Arc flash suit and hood (if required) Hearing protection (if required) Safety helmet (if required) Respiratory protection (if required)
Live electrical work	Footwear Protective clothing* Eye protection Insulating gloves Arc flash suit and hood (if required) Flame-resistant gloves (if required) Face shield (if required) Safety helmet (if required) Hearing protection (if required) Respiratory protection (if required)	Footwear Protective clothing * Eye protection Safety helmet Insulating gloves Arc flash suit and hood (if required) Flame-resistant gloves (if required) Face shield (if required) Hearing protection (if required) Respiratory protection (if required)	Footwear Protective clothing * Eye protection Insulating gloves Flame-resistant gloves Arc flash suit and hood Hearing protection Respiratory protection (if required)

(if required): Determined by the risk assessment.
* Collar up, top buttons done up and sleeves down.

Bracelets, rings, neck chains, exposed metal zips, watches, and other conductive items shall not be worn while working on or near exposed energized conductors or live conductive parts.

*See figure 2.1 below from AS/NZS4836:2011. *"On or near" is defined as within 500mm of the energized exposed conductors or parts

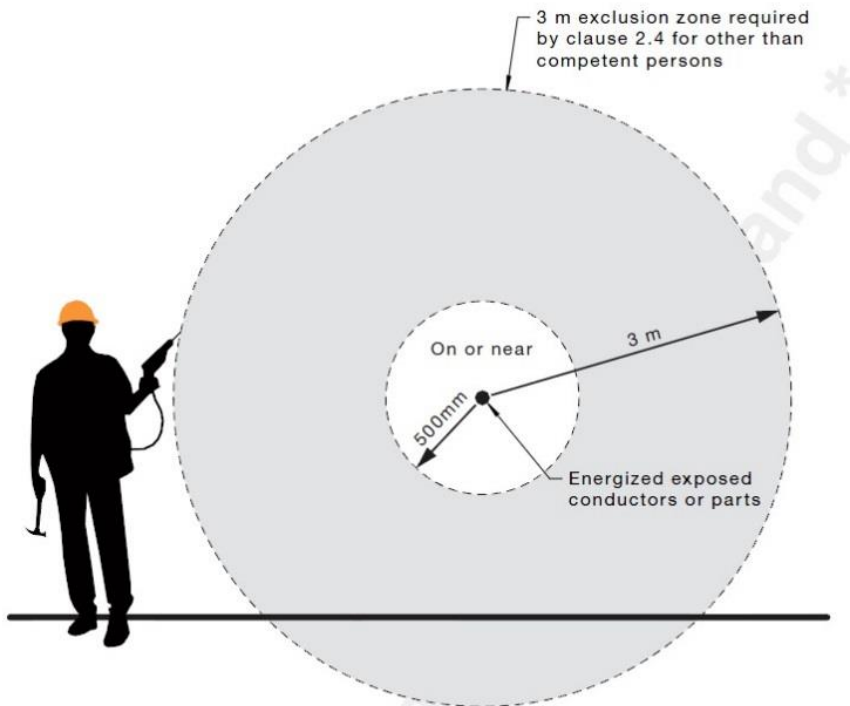


FIGURE 2.1 ILLUSTRATION OF 3 M EXCLUSION ZONE AND 'ON OR NEAR'