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Electricity at Work Policy



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1. INTRODUCTION

1.1 This policy has been produced in response to the Electricity at Work Regulations 1989.

1.2 These regulations elaborate and reinforce the general legislation.

2. POLICY STATEMENT

2.1 All reasonable steps will be taken by the Council to secure the health and safety of employees who use, operate or maintain electrical equipment. The Council acknowledges that work on electrical equipment can be hazardous and it is therefore the Council's intention to reduce the risks as far as reasonably practicable.

2.2 Where a problem arises related to electricity at work, employees must inform their manager or supervisor immediately who will then take the necessary measures to investigate the problem.

2.3 The implementation of this policy requires the total co-operation of all members of management and employees; as well as any contractors hired to carry out work involving electrical equipment.

2.4 The responsibility for implementing the requirements of the policy and the preparation of an implementation strategy rests with each Director or Head of Service.

POLICY GUIDANCE

3. ELECTRICAL SYSTEMS

All electrical systems must, so far as reasonably practicable, be designed, constructed and maintained so as to prevent danger.

4. LIVE WORKING

4.1 Live working must not be considered a normal practice and must be avoided unless absolutely necessary.

4.2 Work on or near live conductors is only permitted if all three of the following conditions are met:

- it is unreasonable in all the circumstances for the system to be dead
- it is reasonable in all the circumstances for the work to be carried out live
- suitable precautions must be taken, i.e.
 - the use of special tools, rubber mats and gloves, etc
 - the presence of another authorised person who understands the activity and who is able to handle an emergency (e.g. remove the victim from further danger, administer first aid, etc)
 - the erection of safety barriers to keep unauthorised persons out of harms way
 - permit to work is required before working live
 - only competent persons authorised to carry out live working.

5. PERSONS TO BE COMPETENT TO PREVENT DANGER AND INJURY

5.1 No employee must be engaged in any work activity where technical knowledge or experience is necessary to prevent danger, or injury, unless they possess such knowledge or experience or are under adequate supervision, as appropriate.

5.2 Competency in this sense includes:

- adequate knowledge of electricity
- adequate experience in electrical work
- adequate understanding of the systems and the practical experience of that class of system
- understanding of the hazards and the precautions
- ability to recognise at all times whether it is safe to continue work.

6. **ACCESS TO ELECTRICAL SWITCH ROOMS**

- 6.1 All electrical switch rooms must be clearly marked.
- 6.2 All electrical switch rooms must only be used for this purpose and not be used for example as a storeroom. Clear access and egress must be maintained at all times.
- 6.3 Only authorised personnel must be allowed in the switch rooms.

7. **SAFE USE OF PORTABLE AND TRANSPORTABLE ELECTRICAL EQUIPMENT**

- 7.1 It must be ensured that procedures are in place for the regular testing and inspection of portable and transportable electrical equipment.
- 7.2 Each individual user of the equipment must be made aware of the tests that must be carried out before they use the equipment and the measures that need to be taken to correct a fault.
- 7.3 Similar testing and inspection must also be carried out on fixed electrical installations.

8. **INFORMATION, INSTRUCTION AND TRAINING**

Employees must be provided with the relevant information, instruction and training to understand the safety procedures which are appropriate when working on electrical systems and/or equipment. Information on electricity at work must be incorporated into existing and new training courses where appropriate, e.g. induction health and safety.

9. SECURING THE HEALTH AND SAFETY OF WORKERS

- 9.1 Appendix 'A' highlights the general arrangements to be considered to ensure the health and safety of workers.
- 9.2 Appendix 'B' gives guidance notes when working on low voltage distribution boards, cables and switchgear.
- 9.3 Appendix 'C' gives a guide to employees regarding electrical safety at work.

10. RECORDS TO BE KEPT

The following records are to be kept:

- inspections and tests (detailing date tested, name of tester and date of next test) plus details of any modifications or repairs made:
- fixed electrical installations
- portable and transportable electrical equipment
- personal protective equipment
- instruments and test equipment used for electrical work
- matters relevant to personal competence and training in respect of persons who carry out, supervise, manage or assess electrical work
- copies of any 'permits to work' issued for work on electrical equipment
- contractors safety information
- safety information provided to contractors.

11. HIGH VOLTAGE APPARATUS

No work must be undertaken on high voltage apparatus without the immediate knowledge and consent of the Council's Electrical Engineer.

12. ADVICE

Advice on the implementation of the policy can be obtained from the Health & Safety Team, Human Resources, Tŷ Elai, Dinas Isaf Industrial Estate, Williamstown, CF40 1NY.

APPENDIX A

GENERAL ARRANGEMENTS FOR SECURING THE HEALTH AND SAFETY OF WORKERS

Ensure that electrical installations and equipment are installed in accordance with the current IEE (Institute of Electrical Engineers) Wiring Regulations.

Maintain the fixed installation in a safe condition by carrying out routine safety testing.

Inspect and test portable and transportable equipment as frequently as required (the frequency will depend on the environment in which the equipment is used and the conditions of the usage, e.g. how carefully it is handled).

Promote and implement a safe system of work for maintenance, inspection and testing.

Forbid live working unless absolutely necessary, in which case a permit to work must be issued before work begins.

Ensure that employees who carry out electrical work are competent to do so.

Exchange safety information with contractors, ensuring that they are fully aware of (and prepared to abide by) the Council's health and safety arrangements.

Provide suitable personal protective equipment, if required, maintaining it in a good condition.

WORKING ON LOW VOLTAGE DISTRIBUTION BOARDS, CABLES AND SWITCHGEAR

GUIDANCE NOTES

These notes have been compiled for all Electrical Engineers in employment by Rhondda Cynon Taf County Borough Council or contracted to provide Electrical Engineering expertise and who carry out work on the Low Voltage Distribution Boards, Cables and Switchgear belonging to the Rhondda Cynon Taf County Borough Council:

Where work has to be carried out on conductors and apparatus, which have been energised at low voltage or can be energised by means of normal switching then the conductors or apparatus should be made dead.

Adequate precautions should be taken to prevent any conductor or apparatus from being accidentally or inadvertently electrically energised when people are working on them. Where it is possible, controlling switches should be locked in the “OFF” position and the person working on the circuit should keep the key.

In addition, where a circuit is protected by fuses, the fuses should be removed and kept in a safe place, preferably with the person who is carrying out the work.

Where it is not possible to lock the switch “OFF”, then other precautions must be taken to prevent the switch being inadvertently closed. This could take the form of the switch handle or switchgear door being securely tied.

With any method of isolation it is necessary to fix at the point of isolation a ‘Notice’ giving warning that persons are working on the circuit and this ‘Notice’ must be securely fixed so that it cannot be accidentally displaced.

Before any work is commenced care must be taken to ensure that the correct conductors or apparatus has been identified. In cases of doubt the apparatus should be treated as live until it can be proved to be dead.

Where possible, or where an earthing switch is part of the isolating device, the conductors or apparatus to be worked on should be short circuited and earthed.

If adjacent apparatus remains energised whilst work on dead apparatus is in process then the energised equipment must be suitably screened and marked with a ‘Notice’ giving warning of the live equipment.

If it is necessary by the person requesting the work or by the persons doing the work that written instructions are required, these shall be prepared and details of any special precautions should also be given.

ELECTRICAL SAFETY AT WORK - A GUIDE FOR EMPLOYEES

INTRODUCTION

This guidance has been produced to provide you with information on electrical safety at work. Most of us use electrical equipment daily in our jobs, whether it's working on a computer, using a photocopier or an electric drill.

MAJOR ELECTRICAL DANGERS

- | | |
|------------------------|---|
| FIRE | Caused by overheating of electrical circuits and apparatus. |
| SHOCK AND BURNS | Caused by bodily contact with live conductors, metalwork or elements. |

GUIDANCE FOR USE OF ELECTRICAL EQUIPMENT

CHECK

Read and understand the operating manual for the equipment before use.
Check leads and plugs on portable equipment before use.
If damaged or broken do not use.

TEST

All portable, transportable and fixed electrical equipment as frequently as required. If you know an item has not been tested, report the matter to your supervisor who will take the necessary action.

PRACTICAL ADVICE

Avoid the use of extension leads
Do not overload circuits by use of multiway adaptors.
Electrical equipment should be kept in well-ventilated conditions

Do not remove plugs by pulling on the cable
For example, do not carry equipment by its cable.
Do not place items over the ventilation holes.

Report defects immediately.
Use 110-volt portable electric tools, where appropriate (transformers may be necessary).

Do not use electrical equipment outdoors or in hazardous conditions unless adequately protected
Do not use machines, tools beyond their capacity.

Make use of a Residual Current Device
(RCD) whenever possible.

DO NOT MAKE

- Adjustments or
- Repairs to any equipment unless authorised to do so.

MANAGERS CHECKLIST

	✓ As Appropriate		
	N/A	Yes	No
• Are there safe working procedures in place if it is absolutely necessary for employees to work on live equipment. For example, the use of a 'permit to work' system?			
• Are there competent persons engaged to ensure that when working on electrical equipment he/she has sufficient technical knowledge and experience to undertake the task safely? Refer to section 5 of the Policy.			
• Has it been ensured that electrical switch rooms are clearly marked; have safe access and egress at all times and are only used for this purpose and not, for example, as storage rooms?			
• Has sufficient information, instruction and training been provided to ensure employees understand the safety procedures when working on electrical systems and/or equipment?			
• Is the information given in Appendix A, B and C of the Policy given full consideration?			
• Are appropriate records being kept?			
• Are there monitoring procedures in place to ensure that the requirements of the Policy are being met?			

Completed by: _____

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