Policy:

EST 008 - Low Voltage Electrical Safety

Executive Director lead	Executive Director of Finance
Policy Owner	Head of Estate Services
Policy Author	Head of Estate Services

Document type	Policy
Document version number	V3
Date of approval	31/03/2020
Approved by	Executive Directors Group
Date of issue	02/04/2020
Date for review	28/02/2023

Summary of policy

This policy is based upon the Health and Safety at Work Act, Electricity at Work Regulations and the Health Technical memorandum 06-02 Guidance for Low Voltage Systems.

Target audience	All SHSC staff and estate contractors

Keywords	Low voltage, HTM 06, electrical

Storage

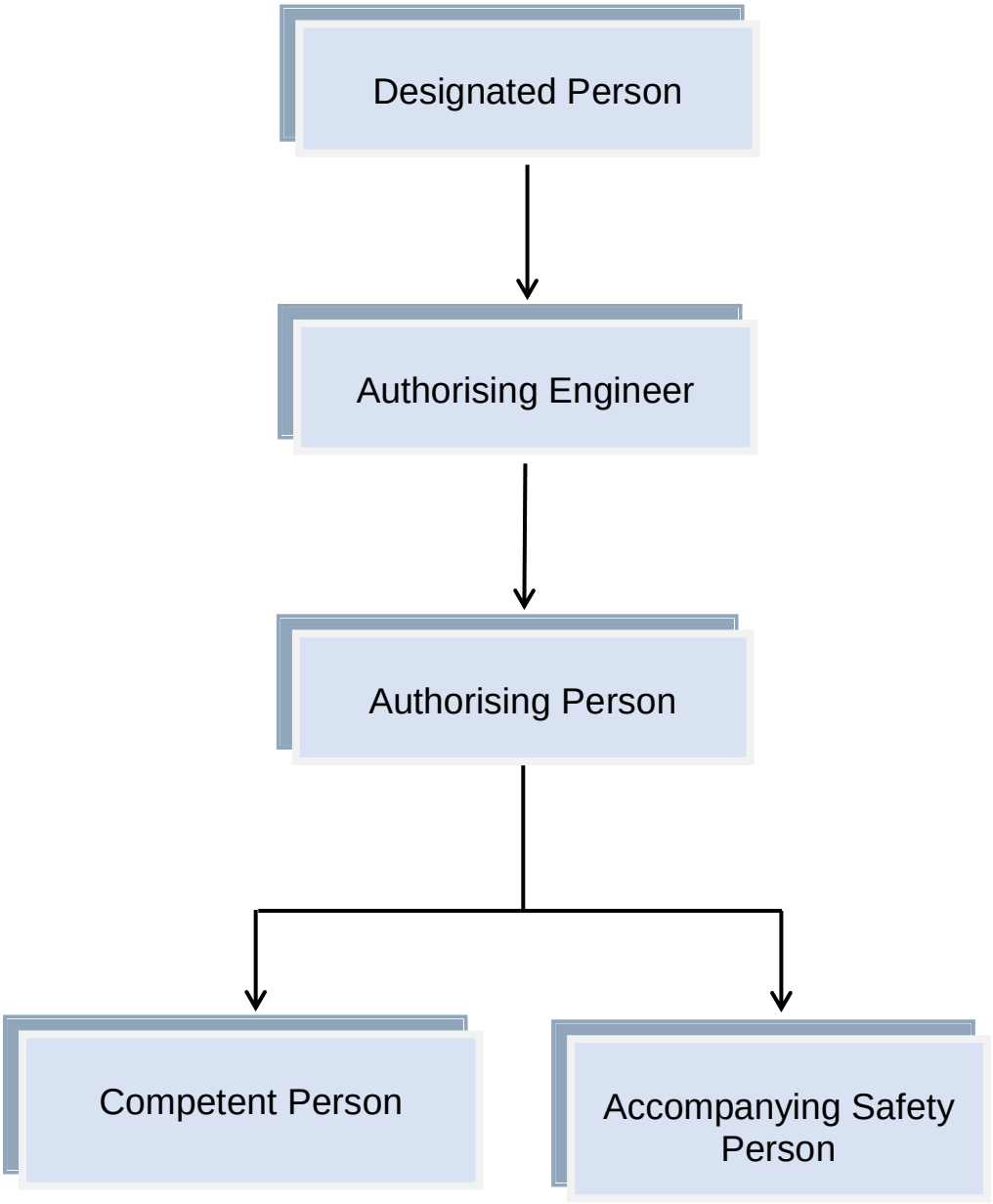
Version 3 of this policy is stored and available through the SHSC intranet/internet. This version of the policy supersedes the previous version, (version 2, April 2017). Any copies of the previous policy held separately should be destroyed and replaced with this version.

Contents

Version Control and Amendment Log

Version No.	Type of Change	Date	Description of change(s)
1	Review policy version 1	February 2017	Change in legislation
2	Consultation period	March 2017	Amendments made during the consultation period
2.0	Review/approve/issue	April 2017	A review was undertaken to update the policy in order to comply with new regulatory requirements
	Review on expiry of policy	December 2019	Amended re new IEE regulations and supporting information from the new AE LV
3.0	Review revised	February 2020	Full review completed as per schedule. To be tabled at the Health and Safety Group and the Policy Governance Group

Flowchart of Appointments



1. Introduction

Sheffield Health and Social Care NHS Foundation Trust (the Trust or SHSC) has a responsibility to ensure all electrical low voltage (LV) networks and systems are safe. All relevant safe working practices are to be followed and adequate precautions taken to prevent the risk of personal injury or death from electrical shock, to all service users, visitors, staff and members of the public. It applies to all persons who have access to, use of, and/or are responsible for the maintenance of Trust premises.

The Health and Safety at Work etc. Act (1974) places a duty on the Trust as employer and its employees to ensure all equipment, plant and machinery is adequately maintained in a safe condition so as not to present a risk to its employees or other persons.

The Electricity at Work Regulations places a duty on employers (directors, managers and heads of service) to ensure all electrical equipment and systems are designed, operated and maintained in a safe condition and that only trained and competent persons are permitted to work with, repair or maintain electrical systems or apparatus. The Regulations apply to almost all places of work and to electrical systems at all voltages.

2. Scope

This electrical safety policy is issued under the authority of the Chief Executive and Trust Board and will apply to all electrical activities undertaken on the Trust's owned or leased premises.

This policy applies to all persons (staff, contractors, service users and members of the public) who may be affected by any electrical activity/works carried out on Trust owned/ leased property undertaken by employees and/or contractors.

3. Purpose

The purpose of this document is to detail the Trust's policy to achieve safety in all its electrical activities in compliance with its legal and statutory obligations and to ensure all electrical equipment and systems are maintained in a safe condition (which does not risk the health and safety of Trust staff, service users, visitors etc.) and that only competent persons are permitted to work with, repair or maintain electrical systems or apparatus.

To provide guidance and reference, to assist both NHS and contractors staff in implementing this Policy.

4. Definitions

Designated Person (DP) - is an individual appointed by the healthcare organisation (a board member or a person with responsibilities to the board) who has overall authority and responsibility for the electrical systems on Trust premises.

Authorising Engineer (AE) - is a chartered or incorporated engineer with the required knowledge, training and experience who possesses the necessary independence from local management and is appointed in writing by the Designated Person. The AE

assesses the suitability and appointment of Authorised Persons.

Authorised Person (AP) - are individuals possessing sufficient technical knowledge and training appointed by management on the recommendation of the Authorising Engineer. Authorised Persons are responsible for implementing the electrical safety policy on a daily basis.

Competent Person (CP) - a Competent Person (LV) is approved and appointed in writing by an Authorised Person (LV) for defined work, possessing the necessary technical knowledge, skill and experience relevant to the nature of the work to be undertaken, who is able to prevent danger or, where appropriate, injury, and who is able to accept a permit-to-work from an Authorised Person (LV). CPs are normally Trust electricians or contractor's electricians.

Electrical Assistant/Caretaker - an individual recognised and appointed by the Authorised Person to carry out basic electrical duties such as lamp changing, fire alarm testing etc. The limitation of their duties will be written into their letters of authorisation.

HTM - Health Technical Memoranda give advice and guidance on the design, installation and operation of specialised building and engineering technology used in healthcare.

Portable Appliances - an appliance that can easily be moved from one place to another.

Movable Equipment - an item of movable equipment is equipment that is either 18kg or less in mass and not fixed. Equipment with wheels, castors or other means to facilitate movement by the operator as required to perform its intended use.

Hand-Held Equipment - a hand held appliance or portable equipment intended to be held in the hand during normal use.

Stationary Equipment or Appliances - an item of stationary equipment or a stationary appliance is equipment that has a mass exceeding 18kg and not intended to be moved.

User Checks - user checks are considered to be an essential safety precaution. Many faults can be determined by a visual inspection.

Formal Visual Inspections - are inspections by competent persons without tests; the results of which, satisfactory or unsatisfactory, are recorded.

Statutory Inspections and Tests - inspections required by BS 7671 and carried out by competent persons using test equipment, the results of which are recorded.

Test Equipment - all test equipment used should be to the basic instrument standard BS EN 61557; Electrical Safety in Low Voltage Distribution Systems up to 1000v ac and 1500v dc. This standard also includes performance requirements and requires compliance with BS EN 61010 and the requirements of HSE Guidance Note GS38.

5. Detail of The Policy

A broad overview of how low voltage electrical systems and equipment are managed is detailed in the *Introduction* (section 1).

6. Duties

Roles and Management Responsibility:
The full roles and responsibilities are defined within HTM 00 and should be referred to for fuller details of individual roles.

- **Chief Executive**
  The Chief Executive holds the overall responsibility for Trust Health and Safety and the implementation of this policy. This responsibility is delegated to the Director of Facilities and nominated estates officers identified below.

- **Director of Facilities**
  The Director of Facilities has been delegated the role of Designated Person. The Director of Facilities is the Trust's lead for electrical safety. He/she will give assurance to the Trust Board regarding compliance with statutory legislation and ensure that all identified risks are included in the Trust's 'Risk Register' at the appropriate level.

- **Designated Person**
  The designated person will carry out the following duties:

  a) Appoint in writing an Electrical Authorising Engineer LV for all systems and installations for which management has responsibility.
  b) Ensure the Authorising Engineer's LV duties have been carried out to comply with the Health Technical memorandum HTM 06-02.
  c) Ensure a register is maintained of all nominated personnel.

- **Authorising Engineer (external consultant)**
  The Authorising Engineer (AE) must be a Chartered or Incorporated Electrical Engineer with suitable knowledge and experience who is appointed in writing by the Designated Person, to advise on safety arrangements for defined low voltage electrical systems.

  The AE shall be independent of the Trust and will assess the suitability and appointment of all Authorised Persons (LV) - Electrical for the Trust.

  The AE will be responsible for implementing, administering and monitoring the application of guidance HTM 06-02 and other relevant statutory instruments

  The AE's duties include the following:

  a) Assess and recommend in writing sufficient Authorised Persons LV to provide the necessary cover for all systems for which Management has responsibility.

  b) Define the exact extent of the systems and installations for which each Authorised person LV is responsible.

  c) If necessary, recommend the suspension or cancellation of the appointment of an Authorised person LV and withdraw the certification.

  d) Maintain a register of all Authorised persons LV and make available to the Designated Person.

e) Ensure candidates for appointment as Authorised persons LV satisfy the qualification requirements.

- **Authorised Persons**
  The Authorised Persons for electrical services are to be senior Estates Officers or of a similar status that possess adequate knowledge, sufficient experience and have received the necessary training within this field.

  The Authorised Persons should be appointed in writing by the Authorising Engineer to control and manage LV electrical services, including standby generator sets.

  The Authorised Person LV will be responsible for the practical implementation and operation of guidance HTM 06-02 and the systems and installations for which management is in control of the danger and for which the Authorised Person LV has been appointed.

  The duties of the Authorised Person include the following:

  a) Satisfy the training and familiarisation requirements

  b) Can demonstrate adequate knowledge of each system, installation and type of equipment for which authorisation is sought.

  c) Have satisfied the Authorising Engineer LV as to their competence and ability.

- **Competent Person**
  The Competent Person LV will have sufficient technical knowledge and experience necessary to organise, supervise and control skilled persons and to prevent danger, to themselves or others, while carrying out work on defined electrical systems. A Competent Person LV may be a member of Estate Services in-house staff or a contractor appointed to undertake defined installation or maintenance work. All Competent Persons LV must be both adequately and appropriately trained.

  The Competent person LV shall comply with the HTM 06-02 safety guidance and this policy.

- **Accompanying Safety Person**
  The Accompanying Safety Person is a person having adequate knowledge, experience and the ability to avoid danger. They are required to keep watch, prevent unauthorised interruption of the work or test, able to apply first aid and summon help when required.

- **Maintenance Manager/AP LV**
  The Maintenance Manager/AP LV is responsible for auditing and ensuring that the accepted policy and procedures for the safe inspection and testing of all electrical equipment are being effectively implemented. The Maintenance Manager has authority and responsibility for the maintenance of low voltage electricity system for the premises maintained by the in-house estates service.

- **Head of Technical Support**
  The Head of Technical Support has the responsibility for the maintenance and upkeep of asset records appertaining to the inventory and history of all electrical equipment in use within the Trust. He/she will ensure the timely production of the Planned Preventative Maintenance (PPM) and status reports.

- **Head of Capital and Strategic Development**
  The Head of Capital and Strategic Development - and project managers - will ensure all new capital works comply with this safety policy and all current legislation, provide adequate information to the appointed personnel so the new installations can be assessed and approved for connection into the system to which they are responsible.

  With respect to all capital and project work undertaken, the Trust's project managers shall be responsible for:

  a) Ensuring adequate communication between the design team and Authorised Persons LV.

  b) Ensuring all works are carried out in accordance with all relevant legislation, standards and guidance documents.

  c) Manage all capital schemes, including commissioning, and the provision of fitted drawings for electrical services.

  d) The provision of operating and maintenance manuals for all new or revised electrical installations and equipment as required by HTM 06-01 and HTM 06-02 and relevant HBNs.

- **Contractors**
  Where a specialist contractor has been appointed under contract to the Trust. The contractor shall be required to comply with site safety rules, developed risk assessments, method statements, permits to work, safe system of working and the following:

  a) The requirements of the Trust's Safety Policies.
  b) The Trust's Low Voltage Electrical Safety Policy.
  c) Any instruction issued by the Trust's Authorised Person(s) in accordance with the Trust's Electrical Safety Rules for Low Voltage Systems.
  d) All contractual staff must comply with the Control of Contractors Policy.

7. Procedures

7.1 Low Voltage (LV) Safety Rules

BS 7671 and the recommendations of the Department of Health's publication HTM 06-01. Electrical services supply and distribution and HTM 06-02 Electrical Safety Guidance for Low Voltage Systems are adopted by the Trust as the method of achieving the legal requirements for electrical safety on LV systems.

7.2 Issue of documents

Each Trust electrical employee shall be issued with a copy of the Trust's Electrical Safety Policy together with a copy of the HTM 06-02 Electrical Safety Guidance (LV) and related documents appropriate to their duties.

Such employees and other persons shall sign a receipt for their copy of the HTM 06-02 Electrical Safety Guidance, (and any amendments thereto), and the Electrical Safety policy, and shall keep them in good condition and have them available for reference as necessary.

Employees, contractors and others who have not been issued with these documents, can view them via the Facilities Directorate widget on the Trust's intranet.

7.3 **Safety Standards**

All persons concerned with work to which the Electrical Safety Guidance LV applies must make themselves conversant with the requirements. Ignorance of the requirements shall not be accepted as an excuse for neglect of duty.

Electrical contractors or other electrical persons shall work safely and not put themselves or others at risk. Failure to do so will invoke disciplinary procedures for in house staff. Contractors whose work is considered to be unsatisfactory or unsafe will be instructed to cease work and their name removed from the approved contractors' list.

All electrical testing equipment must have valid calibration certification.

7.4 **General Electrical Work**

All work carried out on any Trust premises shall be subject to suitable and sufficient risk assessment and the resultant safe system of working will be communicated to all relevant staff and contractors.

A Permit to Work is **not** required for the following work if it is carried out by a Competent Person under the HTM:

- Isolation of final circuits to make them safe.
- Replacement of electrical outlets, fittings equipment and fuses that have been made safe by a competent person.
- Installation of final circuits, new electrical fittings, outlets and equipment.
- The replacement of electrical lamps may be carried out by Electrical Assistants/caretakers provided they have the appropriate technical knowledge, training and information to enable them to work safely.

7.5 **Permits to Work**

A Permit to Work system is a formal recorded process used to ensure it is safe to work on equipment or a system, which is identified as potentially hazardous. Permits in use are:

- Permits to Work Low Voltage (LV): An electrical permit-to-work identifies that a circuit or item of equipment is safe to work on – it has been isolated and, where appropriate, earthed. An electrical permit-to-work must never be issued for work on equipment that is still live or to authorise live work.
- For work carried out on low voltage electrical systems, electrical distribution boards and panels etc.

7.6 **Objections**

When any person receives instructions regarding the operation of, or work upon, the Trust's electrical system and associated plant and apparatus, he/she shall report any objections on safety grounds to the carrying out of such instructions to the persons issuing them, who shall have the matter investigated and, if necessary, referred to the Authorising Engineer for a decision before proceeding.

7.7 **Nominated Staff**

The following personnel (1 to 4) are appointed in writing for LV duties as defined in section 5 and HTM 06-02:

1. Designated Person
2. Authorising Engineer (Low Voltage) - external consultant
3. Authorised Persons
4. Competent Persons

7.8 **Management of Contractors**

Only approved contractors and sub-contractors with a suitable level of competence are to be used.

It is the responsibility of Trust managers to ensure all contractors employed to work on Trust-managed properties possess the appropriate level of technical knowledge and experience to enable them to discharge their duties.

Electrical contractors who are required to work on Trust property shall be approved and signed off as competent by the Trust AP(LV) under HTM 06-02. Approval of electrical contractors to undertake work for the Trust shall be by the AP(LV) only.

The register of approved electrical contractors' Competent persons shall be maintained by the AP(LV) with assistance from Estates Services.

The following should be considered when appointing an electrical contractor:

- Current qualifications and training of employees
- Employers letter of competency to carry out the respective duties.
- Technical references
- Current company safety policy
- Audited and signed off by the Trust AP(LV)

Contractors are to be provided with sufficient information about Trust systems, (e.g. diagrams), to enable them to plan and execute their work in a safe manner.

Contractors are to supply written risk assessments and/or a safe method of work prior to commencing work to the AP(LV), and the project manager initiating the work.

Contractors shall liaise with the Trust's LV Authorised Person(s) who will agree isolation procedures for work on the electrical system.

Contractors employed by the Trust for work on its LV system will comply with the requirements of the current edition of the lEE Wiring Regulations BS 7671: and will complete documentation and certification in accordance with the IEE wiring

regulations and the Trust's requirements. All work carried out by contractors shall be in accordance with HTM 06-02 notably sections 5.1.1 to 5.15 and HSG85.

When electrically powered tools are used, battery-operated are preferred. Where mains electrical supply is required, all contractors will ensure that all portable electrical tools are of maximum voltage of 110 volts. The supply will be by means of a 110-volt transformer centre-tapped-to-earth., controlled by an RCD from the 240v supply.

7.9 Live Working

It is the policy of the Trust not to normally permit any form of live working on electrical systems. If live working is required to be carried out, it will only be authorised under exceptional circumstances which must be approved by and certified by the Trust's Authorised Person and after consultation with the Authorising Engineer.

A certificate of authorisation for live working shall be issued together with a Live functional testing - self check safety precautions LW1. The certificate shall indicate what equipment shall be worked on, details of the work to be undertaken what safety equipment is to be used, and the safety precautions to be taken.

7.10 Fixed Electrical System

7.10.1 Low Voltage Periodic Testing of LV Electrical System

All fixed LV electrical systems owned by the Trust shall be periodically inspected and tested in accordance with BS 7671.

The frequency of fixed wiring inspection and testing should not exceed 5 years. Details of the requirements and records for inspection and testing are held within the Facilities Directorate.

All testing must comply with the requirements of BS7671, HSG 85, HSG 230 and HTM 06-02.

7.10.2 Circuit Identification (in accordance with BS 7671)

All LV switchgear and distribution boards shall be uniquely identified by securely attached and prominent labels. Each distribution board shall have an up-to-date, on-site circuit chart that allows accurate and easy identification of all circuits connected to the switchboard.

Each room containing an LV switchboard or panel shall have the required schematics and posters displayed as required by BS 7671 and HTM 06-01 and 06-02.

Final circuit outlets or switches shall also be labelled to reference them to their controlling switch/fuse/miniature circuit breaker at the distribution board, both externally and internally

LV schematic diagrams showing the Trust's LV electrical system layout and circuit/switchgear identification references shall be provided and up-dated as necessary.

7.10.3 New Works or Additions

All new LV work including minor additions shall be carried out in accordance with the current edition of BS 7671.

Testing and records for such work shall be as detailed:

- New work
- Minor works, (on an existing circuit)
- Any additional/project work, (regardless of how small), must be accompanied by certification updated drawings, manuals and hand-over.

7.10.4 **LV Fixed Equipment Maintenance**

All low voltage equipment, (e.g. ventilation systems, industrial boiler plant, lifts, industrial compressors etc.), shall be regularly inspected, serviced and tested to ensure they are maintained in a safe and serviceable condition. Test periods shall not exceed 12 months. A record of maintenance of electrical equipment shall be kept by the Facilities Directorate and will contain brief details of all inspections, routine servicing, repair and modifications.

7.10.5 **LV Switchgear**

All LV switchgear shall be maintained to ensure its safety and operational capability is maintained. Maintenance intervals shall not exceed the following periods:

- Visual inspection and test every 5 years
- Thermo-graphic survey every year on heavily loaded and/or operationally sensitive units

7.10.6 **Standby Emergency Generators**

All fixed LV standby emergency generators shall be maintained, tested and fueled to ensure their correct operation in the event of mains failure.

The fuel storage of each generator connected fuel tank shall provide for a minimum of 10 hours running at the full rating of the generator. Additional on-site fuel storage to allow a minimum of 24 hours full load running of each generator shall be arranged.

Each generator shall be tested on load each month. Fuel levels shall be checked at the end of each test. Any fault must be recorded and rectified.

7.10.7 **Fixed Uninterruptible Power Systems (Battery Operated)**

All uninterruptible power systems (UPS) shall be maintained annually to ensure they have full operational capability. It is essential that this maintenance includes a short period (usually 1 to 2 minutes) when the UPS is put on-load, i.e. batteries discharged. During this period battery output voltage should be monitored to confirm satisfactory battery conditions.

In addition to the annual UPS maintenance a full battery maintenance shall be conducted every 2 years (or annually if results indicate battery condition is deteriorating) to comprehensively

assess the battery. Tests conducted shall include battery internal impedance and an extended on-load test.

In the event of a mains failure (or disconnection) and subsequent stand-by generator operation to restore supply all connected emergency power systems shall be regularly monitored to ensure correct synchronisation of rectifier/inverter circuitry, i.e. to confirm UPS system does not go into battery operation due to hunting of generator frequency and/or voltage.

NB
If generator control is such that severe hunting does occur, (UPS alternating between normal and battery discharge), it will not be possible to select mains bypass on the UPS system, (static switch will not allow bypass with mains hunting until batteries discharged), so the UPS may fully discharge unless action is taken. Advice must be taken from an authorised person as to appropriate action, which could involve load disconnection and/or generator shutdown.

7.10.8 **Portable Uninterruptible Power supplies**
A notification and details including any service or warranty information associated with any portable uninterruptible power systems shall be sent by the user or purchaser to Estate Services for appropriate action.

7.11 **Portable Electrical Equipment**
The Trust will adopt the Institute of Engineering and Technology (IET) document *Code of Practice for in-service inspection and testing of electrical equipment 3rd edition* as the standard reference document for the testing of portable, movable, hand-held, stationary equipment or appliances and information technology equipment. This is otherwise known as Portable Appliance Testing (PAT).

The primary responsibility for day-to-day safety of portable equipment when in service lies with the user(s). Any person using portable electrical equipment shall, before using it, personally check that the equipment, including the flexible cable and plug top, is free from mechanical damage and that the in-date PAT test label is attached and a valid date shown.

As required by HTM 06 the Trust holds an up-to-date register of all electrical equipment. Managers must inform Estate Services of any electrical equipment brought in by staff, service users or visitors and to ensure that it is not used until it has been tested and cleared for use. In order to facilitate this requirement all new equipment should be purchased via the Trust's Supplies and Procurement Department and tested within one year after purchase. New portable electrical equipment does not require PAT testing prior to first use as it is covered by manufacturers guarantee for the first 12 months.

It is the responsibility of each member of staff to ensure that his/her own personal electrical items are not used at work until tested and cleared for use. Staff are advised it is not standard practice to permit personal portable electrical equipment to be brought into the Trust for use; any derogation must first of all be agreed with their online manager and then with the Director of Facilities.

NB
The above arrangements apply to the Trust's owned or leased premises. Trust staff working in locations belonging to partnership organisations should ensure their electrical equipment is tested in line with those organisations arrangements.

7.12 **Extension Leads and Block Adaptors**
The use of block adaptors is prohibited in the Trust. When a block adaptor is used with several plugs the angle and weight increases the stress on the socket.

The use of extension leads should be avoided, where possible, and only used whenever it is not possible to reach a wall socket with the equipment cable:

- Extension leads are particularly liable to damage - to their plugs, sockets, connections and the cable itself. Typically, from leads being walked over, continually bent at the same point or stored badly.
- You can trip or fall over taut, over stretched cable.
- Use of extension leads increases the risk of fire.

The use of cable drum extension lead is only permitted for short duration work and should be completely unwound to avoid overheating.

Additionally:
- Wherever possible, extension leads shall not be used and removed from use in clinical environments.
- Extension leads must not be used in wet environments.
- Extension leads should not be plugged into another extension lead or overload the socket, (i.e. all appliances using the extension lead should not total more than 13 amps).

Installation of new circuits can be requested via Estate Services provided the distribution board has sufficient capacity to allow such.

7.13 **Information, Instruction and Training**
The Trust's Estate Services will ensure all relevant employees are adequately trained and competent to undertake electrical work safely and in accordance with Health Technical Memorandum 06-02: *Electrical safety guidance for low voltage systems.*

7.14 **First Aid Training**
All Trust staff employed on the installation, maintenance, or operation of electrical distribution equipment and installation wiring are to be trained in first aid treatment for electric shock.

The Authorised Person shall be responsible for arranging such training and maintaining the records. Refresher training shall also be arranged at intervals not exceeding three years.

7.15 **Reporting Alerts, Accidents and Dangerous Occurrences**
Staff and contractors must comply with the Trust's Incident Reporting and Investigation Policy and report accidents that have occurred, near misses, and uncontrolled hazards. Electrical issues are to be reported to the AP(LV).

Any Safety Alerts concerning electrical equipment will be evaluated and, where appropriate, communicated to relevant staff.

8. Development, Consultation and Approval

The following were involved with developing and approving this policy, version 3:

- Head of Estate Services, - December 2019 to February 2020
- Consultation with senior Estate Services managers and Trust Authorising Engineer
- Approval by the Trust's Health and Safety Group - February 2020
- The Policy Governance Group and the Executive Directors' Group to approve the policy in March 2020

The previous policy has been re-drafted due to a change in BS 7671, 17th to 18th edition and advice from the newly-appointed, independent Authorising Engineer, Low Voltage.

9. Audit, Monitoring and Review

Monitoring Compliance Template

Minimum Requirement	Process for Monitoring	Responsible Individual/ group/ committee	Frequency of Monitoring	Review of Results process (e.g. who does this?)	Responsible Individual/group/ committee for action plan development	Responsible Individual/group/ committee for action plan monitoring and implementation
a) Policy monitoring	Review, audit	• Author • Health and Safety Group • Estates Compliance Group	Quarterly, via the Estates Compliance Group	• Author • AE • AP	Health and Safety Group and the Estates Compliance Group	Health and Safety Group and the Estates Compliance Group

The Head of Estate Services is responsible for auditing, monitoring and reviewing the effectiveness of this policy. Adequate records shall be maintained for the following:

a) Staff training and authorisation.
b) Tests/work associated with commissioning, maintenance, inspections, testing and repair of fixed and portable electrical equipment, wiring, switchgear and plant, including generators Ups/IPS system and lightning protection systems.
c) The Trust's electrical distribution system circuit routes conductor sizes, switchgear and usage ratings, protection relay settings and control/isolation/final outlet positions.
d) Location of emergency battery lighting supply.
e) Drawings, manuals and test certification for all new/additional work.

This Policy will be reviewed in 3 years, or earlier if needed due to changes in national guidance, legislation, lessons learned or significant incidents.

HTM 06-02 (LV) Audit
The Authorising Engineer shall submit an annual report on the effectiveness of the Trust's compliance with HTM 06-02 (LV). See Section 6, Duties - Roles and Management Responsibilities.

10. **Implementation Plan**

Action/Task	Responsible Person	Deadline	Progress Up-date
Put revised policy onto intranet and remove old version	Communications	April 2020	
Inform all Trust staff of the revised policy via Trust-wide email	Communications	April 2020	
Inform relevant Estates staff of the revised policy and implement training as required	Head of Estate Services	April 2020	
Communicate the revised policy to the Health and Safety Group and the Estates Compliance Group	Head of Estate Services	May 2020	

11. **Dissemination, Storage and Archiving**

Links to an electronic copy of the policy shall be circulated via a Trust-wide email. An electronic copy of the policy shall be accessible via the Trust's intranet/internet.

An archive copy of the previous policy, and the new updated policy, shall be stored with Estates Services for reference.

12. **Training and Other Resource Implications**

Managers and the AP LV have the responsibility to inform relevant employees and contractors of any hazards that may exist when carrying out maintenance work, operation, testing or other repairs to equipment within their department. The Facilities Directorate's Maintenance Craftspersons are to be made aware of the dangers from electrical shock, injury or burns. The information given should include:

- The nature and type of risks to health, where applicable
- Control measures employed
- Working procedures/policies

All records of training are to be maintained by the Facilities Directorate.

Arrangements shall be made by the appropriate manager to ensure:

- All employees concerned with particular work activities are adequately informed as to the as to the systems, plant and apparatus that are affected, and instructed in all necessary safety procedures.
- So far as reasonably practicable, other persons who are not employees, but may be affected by the work activities also receive adequate information and/or instruction.

13. Links to Other Policies, Standards, References, Legislation and National Guidance

- Management of Contractors Policy
- Health and Safety Policy
- Incident Reporting and Investigation Policy
- Procurement Policy
- Lift Policy
- Asbestos Policy
- Health and Safety at Work etc. Act 1974
- Electricity at Work Regulations 1989
- Hospital Technical Memorandum HTM 06-02 Electrical Safety Guidance for Low Voltage Systems
- BS 7671- IEE Wiring Regulations
- Electrical Safety, Quality and Continuity Regulations 2002
- Electromagnetic Compatibility Regulations 2006
- Provision and Use of Work Equipment Regulations 1998
- Health and Safety (first aid) Regulations 1981
- Personal Protective Equipment Regulations 1992
- Manual Handling Operations Regulations 1992
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
- Confined Spaces Regulations 1997
- Construction Design and Management Regulations 2015
- Electricity Act 1989
- Electricity Safety, Quality and Continuity Regulations 2002
- The Electrical Equipment (Safety) Regulations1994
- The Plugs and Sockets etc. (Safety) Regulations 1994

14. Contact Details

Title	*Name*	*Phone*	*Email*
Head of Estate Services (Authorised Person)	Mark Gamble	18698	mark.gamble@shsc.nhs.uk
Maintenance Manager (Authorised Person)	Daniel Mulhall	11155	daniel.mulhall@shsc.nhs.uk

Addendum - Working Safely: End Users

Equipment repairs or alterations to an electrical installation or portable equipment must only be carried out by a competent person authorised by Estate Services.

Any person using portable electrical equipment should, before using it, personally check that the equipment, including the flexible cable and plug top, is free from mechanical damage and that the in-date test label is attached.

Users are required to check that:

- Suspect or faulty equipment is taken out of use; labelled 'DO NOT USE', inform Estate Services and keep secure until examined by a competent, authorised person.
- Where possible, tools and power socket outlets are switched off before plugging in or unplugging.
- Equipment is switched off and/or un-plugged before cleaning or adjusting.

You must not work on, or near, exposed, live parts of equipment unless it is absolutely unavoidable and suitable precautions have been taken to prevent injury and authorised by and certified by the Trust's Authorised Person after consultation with the Authorising Engineer.

Safety checks in more detail
When inspecting equipment, it is advised to consider the following:

- The flex:
    - Is it in good condition?
    - Is it free from cuts, fraying and damage?
    - Is it in a location where it could be damaged?
    - Is it too long, too short or in any way unsatisfactory?
- The plug, (where fitted):
    - Is the flexible cable secure in its anchorage?
    - Is it free from any sign of overheating? Is it free from cracks or damage?
- The socket outlet or flex-outlet:
    - Is there any sign of overheating?
    - Is it free from cracks and other damage?
- The appliance:
    - Does it work?
    - Does it switch on and off properly?
    - Is it free from cracks, contamination, damage to the case, or damage which could result in access to live parts?
    - Can it be used safely?
- Users:
    - Are you satisfied the equipment works properly?
- The environment:
    - Is the equipment suitable for its environment?
    - When the work environment is harsh or hazardous, e.g. if the equipment is exposed to mechanical damage, the weather, high or low temperatures, pressure, wet or dirty or corrosive conditions, flammable or explosive substances, particular care needs to be taken when selecting the equipment, and additional safety precautions may also be required.

Example 1:
A vacuum cleaner should not be used for the removal of water or other spillage from a carpet or floor unless it has been specifically designed for the purpose.

Example 2:
Equipment designed for internal use should not be used externally with an extension lead in wet conditions or where it may be liable to mechanical damage.

Where there is an area of concern, advice should be sought from Estate Services.

Appendix A

Equality Impact Assessment Process for Policies Developed Under the Policy on Policies

Stage 1 - complete draft policy

Stage 2 - **Relevance**
Is the policy potentially relevant to equality, i.e. will this policy potentially impact on staff, patients or the public? If **NO, n**o further action is required. Please sign and date the following statement. If **YES,** proceed to stage 3

This policy does not impact on staff, patients or the public (insert name and date) Mark Gamble, February 2020

Stage 3 - **Policy Screening**
Public authorities are legally required to have 'due regard' to eliminating discrimination, advancing equal opportunity and fostering good relations, in relation to people who share certain 'protected characteristics' and those that do not. The following table should be used to consider this and inform changes to the policy (indicate yes/no/ don't know and note reasons). Please see the SHSC Guidance on equality impact assessment for examples and detailed advice. This is available by logging-on to the Intranet first and then following this link https://nww.xct.nhs.uk/widget.php?wdg=wdg_general_info&page=464

	Does any aspect of this policy actually or potentially discriminate against this group?	**Can equality of opportunity for this group be improved through this policy or changes to this policy?**	**Can this policy be amended so that it works to enhance relations between people in this group and people not in this group?**
AGE	**No**		
DISABILITY	**No**		
GENDER REASSIGNMENT	**No**		
PREGNANCY AND MATERNITY	**No**		
RACE	**No**		
RELIGION OR BELIEF	**No**		
SEX	**No**		
SEXUAL ORIENTATION	**No**		

Stage 4 – **Policy Revision** - Make amendments to the policy or identify any remedial action required (action should be noted in the policy implementation plan section)
Please delete as appropriate: Policy Amended/Action Identified/No Change(s) made.

Impact assessment completed by Mark Gamble, February 2020