

# ESTATES COMPLIANCE ARRANGEMENT (ECA)



UNIVERSITY OF  
LINCOLN

## ECA 06 Electrical Compliance

### 1.0 Policy Link (Level 1 Document)

This arrangement has been written in line with the UoL Control of Electricity at Work Policy and Guidance notes which can be found at: [Health and Safety Department \(sharepoint.com\)](#)

### 2.0 Purpose

To establish effective electrical arrangements to manage, maintain, test, and inspect all electrical installations (including portable/transportable electrical equipment) across the Estates Department managed University of Lincoln sites.

### 3.0 General

The Electricity at Work Regulations 1989 imposes legal duties specific to electrical safety which are applicable to all work activities involving electricity. The regulations mean employers must consider the suitability, design, construction, and installation of electrical systems used for specific tasks in the workplace, where such systems are sited, and the protection and precautions provided for the use of such systems. There are no voltage limits, and the scope of the regulations extends from the smallest simplest battery systems such as torches to the national electrical transmission distribution network voltages. For HV the document Electrical Safety Rules has been published to ensure safe systems of works and compliance.

For full details of the Electricity at Work Regulations 1989 please use the embedded links below:

[The Electricity at Work Regulations 1989 - HSR25 \(hse.gov.uk\)](#) and

[The Electricity at Work Regulations 1989 \(legislation.gov.uk\)](#)

[Electrical Safety Rules](#)

#### Duty Holders

Within the Regulations the Legal **Duty Holder** is clearly defined. The Director of Estates is the Duty Holder. They delegate the operational responsibilities to ensure compliance to the Project Engineer and Mechanical and Electrical Engineers within the Estates Department.

For further information on electricity at work and safe working practices please see the link embedded below:

[Electricity at work: Safe working practices \(hse.gov.uk\)](#)

However, the legislation states that where an employee is in **control** of electrical danger, the duties imposed on the individual are equivalent to the duties placed on the employer and the self-employed.

If they are in any doubt about this, then they should contact the Estates Project Engineer or Mechanical and Electrical Engineers.

For full details relating to roles and responsibilities please see Appendix 1

### 4.0 Procedure

'An electrical system' is a system in which all the electrical equipment is, or may be, electrically connected to a common source of electrical energy. 'Electrical equipment' includes anything used

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or installed for use, to generate, provide, transmit, transform, rectify, convert, conduct, distribute, control, store, measure or use electrical energy.

'The person in control of electrical danger' MUST be competent by formal training and experience, and with sufficient knowledge to avoid electrical danger from low voltage batteries to high voltage systems across the University campuses.

The Estates Department are responsible for ensuring that electrical items are tested, maintained and remedial works completed as necessary across University managed property and its places of work.

### Risk Assessments

Risk assessments must be conducted for all activities where electricity is involved. These must be carried out by those with the specialist knowledge and must always be suitable and sufficient and commensurate with the risk. For this reason, the person conducting the risk assessment for working with electricity must be competent and have appropriate knowledge and expertise to evaluate the measures necessary to control the risks of working with electricity. This involves assessing the likelihood of injury and severity of injury against the control measures needed.

### Permits to Work

Limitation of Access permits are issued for work in areas containing high voltage (HV) electricity (above 1000v) by a contractor or the University's specialist high voltage contractor. This extends to any areas containing HV electricity and the access to the low voltage side of HV circuits. Maintenance work within a HV environment will require a Limitation of Access Permit. For surveying works or carrying out routine tests e.g. fire alarms no permit is required, this has to be carried out with a University Authorised Role in attendance. Limitation of Access permits can be found under the Permit to Work link on the Estates Department website.

Please refer to ECA 05 PTW for a full list of Authorised Roles (ARs) and the process for obtaining a permit.

### Live working and live testing

It is University policy that live work on electrical systems should not be carried out, except where it would be impossible to continue with equipment made dead. In these cases, parts which are not needed to remain live are to be made dead. In these cases, Regulation 14 of the Electricity at Work 1989 Regulations needs to be followed.

### Isolation of supply

All circuits or electrical equipment to be worked on shall be isolated, proved dead and suitably locked off with safety locks and safety signs displayed, prior to exposing or working on any conductors.

### Inspection and testing

Following inspection and testing of a new or existing installation, certification is to be provided within 28 days of completing the inspection and testing in addition to the documents required in the table below. These certificates are uploaded to Planon for the appropriate record keeping. The appropriate certificate/report is to be handed to the person ordering the work who is to retain it for the whole working life of the installation. The certification must include the Schedule of Inspections and Schedule of Test Results.

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Type of Work Completed	Type of Form Required
New Installation or installation of new distribution boards or similar items	Electrical Installation Certificate
Alterations or additions	Minor Electrical Installation Work Certificate
Periodic Inspection and Testing	Electrical Installation Condition Report
Replacement of equipment such as accessories or luminaires, but not for the replacement of distribution boards or similar items.	Minor Work Certificate

### CE Marking

On the 01 January 2021 a new UK electrical marking system was introduced. This marking is called the **UKCA** (UK Conformity Assessed). The EC marking remains in place while a transitional period until 01 January 2023 has been allowed for the safe introduction of the UKCA marking.

### Minor Electrical Works Installation Certificates

Where Minor Electrical Installation Works Certificates are required for remedial actions they should be of the same format style as the Electrical Installation Condition Report.

### Electrical Installation Condition Testing

Electrical Installation Condition Testing (fixed wire testing) is normally carried out on a five-year cycle, except for places of public entertainment (such as LPAC, the Engine Shed) which will be annually.

When the testing is carried out, any Code 1 faults that are identified must be rectified by the electrician at the time or the circuit identified must be made safe. Code 2 faults must be scheduled in for repair as per the advice given by the tester.

### PAT Testing

A portable or moveable piece of electric equipment is generally any item that can be moved, either connected or disconnected from an electrical supply. Portable or moveable items generally have a lead (cable) and a plug. Estates Department will test all portable electrical equipment used for educational purposes.

Any portable electrical items supplied by the University of Lincoln and brought onto a University campus must be notified to the Estates Department via the University's Planon system to be added to the testing regime where necessary. Brand new equipment generally should not need a PAT test until at least one year of use.

It is the portable electrical equipment owner's responsibility to inform the Estates Department of its location and approximate age.

For full details of the process for PAT testing please see Appendix 2.

For further guidance on the maintenance of portable electrical items in a low-risk environment please use the link embedded below:

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### Replacement of accessories

The replacement of an accessory such as a socket outlet, ceiling rose, or lighting switch is regarded as responsive maintenance work. The NICEIC expects Approved Contractors undertaking such work to carry out essential inspection and testing to ensure that the replacement accessory is safe to use before being put into service.

As a minimum, a test to confirm that shock protection has been provided is essential.

Other tests are:

- Test to establish the earth fault loop impedance (the value of which needs to be checked against the characteristics of the protective device).
- Polarity.
- Where an RCD is used for fault protection or additional protection the correct operation of the RCD.

A record of the replacement of the accessory including results of inspection and testing should be included for the benefit of both the person ordering the work and the contractor. The Minor Electrical Installation Work Certificate is the most appropriate form available for providing such a record.

### High Voltage (HV)

All substations and distribution boards handling above 1000 volts alternating current or 1500 volts direct current are deemed as HV and as such a specific arrangement (Appendix 3) has been developed and must be adhered to.

Please see Appendix 3 Working Safely on HV Electrical Distribution Networks for further details and guidance on HV works.

### Purchase or disposal of electrical equipment

If new electrical equipment is sourced/brought onto campus at the University of Lincoln, then it is the responsibility of the School/College to inform the Estates Department.

The equipment **MUST** be added to the University's Planon system schedule for inspection. This inspection must be completed as per the schedule for the equipment in question. To add the equipment to the Planon system please contact the Estates Department Support Desk (estatessupport@lincoln.ac.uk)

Electrical equipment that is to be sold on, or which is donated by a department must also be safe and meet legal safety requirements in relation to its design and construction and this must be verified before being offered for sale or donated. Written instructions for safe operation of the equipment must be provided for the intended recipient. Electrical equipment that is hired out is also within the scope of these regulations.

End of life disposals of electrical equipment must be in accordance with the EU Waste Electrical and Electronic Equipment Directive (WEEE Directive). This minimises the impact on the environment by re-using, recycling, and reducing the amount of WEEE going to landfill. More disposal information including hazardous WEEE can be sought from the Estates Department Environmental Management team and our waste disposal contractor.

For further details on the legislation surrounding WEEE please see the embedded link below:

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[The Waste Electrical and Electronic Equipment Regulations 2013 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

### 5.0 Estates Department points of contact

Contact the Estates Compliance Team for clarification or further guidance on these arrangements.

### 6.0 Associated Documents

#### Internal

##### Level 2 Associated Documents

Reference	Title
Estates Department	Environmental Management System for disposal

##### Level 3 Documentation

Reference	Title
	N/A

#### External

Source	Title
Legislation	The Electricity at Work Regulations 1989
Legislation	The Waste Electric and Electronic Equipment (WEEE) Regulations 2013
HSE Guidance	Electricity at work: Safe working practices
HSE Leaflet	Maintaining portable electric equipment in a low risk environment – INDG236 rev 3
UoL Estates	Electrical Safety Rules

### 7.0 Change History

Version	Date	Summary of Changes Made
1	26/02/21	Creation of Document
2	07/06/21	Internal Review Board Check
3	03/03/22	RW and SJ updates
3.1	06/07/22	RW minor updates
3.2	30/08/22	SB and RW final review
3.3	24/01/23	RW formatting tweaks
3.5	08/02/23	SB added Electrical Safety Rules and additional items about PAT testing.
3.5.1	15/02/23	SB add comments about when equipment is not tested by Estates

### 8.0 Appendixes

Appendix	Title
1	Roles and responsibilities with Electricity at Work
2	Statutory Portable Appliance Testing
3	Working Safely on HV Electrical Distribution Networks

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### APPENDIX 1

#### **Roles and Responsibilities with Electricity at Work**

##### Director of Estates

Is responsible for the following:

- All approved/notified hard wired electrical installations within a University building, including both electrical sockets and electrical lighting as supplied in the ceilings, floors or walls and non-specialist fixed equipment e.g. water heaters, air conditioning units etc.
- All street lighting installations within the campuses including car parking areas, cycle and footpaths leading onto main roads.
- All electrical lifts and electrically operated doors.
- All sub-stations and switch rooms (other than those provided by statutory authorities) including mains supplies, lightning conductors, general and specialist earthing.
- All University owned High & Low Voltage electrical distribution Infrastructure.

##### Heads of Departments/Colleges

Heads of Department must liaise with the Estates Department regarding any electrical works they require. The Estates Department must be informed of any electrical work that is needed to be carried out so an approved contractor can be appointed.

They must ensure that areas where electrical switchgear is installed are kept clean, tidy and unobstructed at all times. Dedicated switchgear space must not be used as storage space.

When work is taking place on the electrical distribution system, Heads of Departments/Colleges must exercise their responsibilities as the persons in general control of the workplace, to ensure that in-house personnel and contractors are provided with a safe working area and supply suitable and sufficient information to enable induction training to be carried out covering hazards specific to that environment at that time to enable them to all work safely.

They must ensure that electrical systems and equipment, for example portable appliances are properly recorded, tested, maintained, and disposed of if required. Responsibility for all electrical equipment and associated works lies within their respective departments. Examples could include but are not restricted to the following:

- Any electrical equipment not fitted as part of a building's structure such as workshop and specialist laboratory equipment, computers and printers, monitors, portable desk lighting, portable electrical heaters and fans and temporary extension leads. Any issues with potential safety implications should be reported to the Estates Support Desk.

The Electricity at Work Regulations must be taken into account in the risk assessments for teaching and research activities. Particular attention must be paid to the competent supervision of students and others involved in electrical work.

Adequate forethought must be given to the safety of other persons who may be affected by the activities. The regulations are specific in that no person may be engaged in any work activities where technical knowledge or experience is necessary to prevent electrical danger, or injury, unless he/she possesses such knowledge or experience, or is under such a degree of supervision as may be appropriate in relation to the nature of the work. The supervisors of academic and similar work must be aware of these requirements and compliance must be ensured

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The Maintenance and Project Teams and Estates Communications Officer will liaise with departments, particularly in respect of timing, access, isolation of supplies and notification of intended works (full building or HV shutdowns at all sites) so that departments are aware of essential maintenance and compulsory electrical testing to be carried out.

Departments other than Estates must not carry out any modifications or extensions to the systems defined without prior knowledge and written approval of the Estates Department.

### Managers and Supervisors

Managers and Supervisors must ensure that:

- Work activities involving electricity are assessed in terms of any associated risk, and records kept.
- Activities avoid contact with overhead lines and underground cables.
- Electrical equipment is correctly constructed, installed and maintained and suitable for their operating environment.
- Inspections and tests of portable electrical equipment are performed at regular intervals, and records kept that include details of modifications.
- Records of all recognised competent staff are kept with information on training and expertise.
- Requirements of any permits to work are adhered to.
- Battery powered portable tools are provided where possible, to eliminate the risks of serious electric shock and trips over cables, e.g. cordless drills.
- Any portable electrical equipment is disposed of in accordance with the Waste Electrical and Electronic Equipment (WEEE) Regulations.





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### APPENDIX 2

#### Statutory Portable Appliance Testing

As per current HSE legislation and supporting guidance INDG236 Rev 3 the University will have a regular inspection system in place for portable electrical equipment.

The purpose of this procedure is to specify what electrical equipment will be tested and at what frequency.

The testing itself is carried out via the Estates Maintenance Contractor as part of the general maintenance contract. Any queries regarding planned testing dates should be directed in the first instance to the Estates Compliance Team, who will answer any queries regarding the testing.

#### Process

Any equipment owner with equipment which fails the testing procedure will be notified electronically in the first instance from the PAT tester to the Estates Support Desk. All failed items will have a suitable red failure label affixed to the equipment and will be locked off so that they do not get used.

The Estates Support Desk will then notify by email a list of failed items to the relevant **Heads of Departments/Colleges**. Once notified it is the responsibility of the school/college to ensure that the failed items are either repaired or removed from service (by logging a job on Planon) and a record of actions taken forwarded to the Estates Support Desk. The lock-off plug can only be removed once the equipment has been fixed, repaired, or recommended to be disposed of. Please see below for the disposal process.

Note: not every electrical item needs a portable appliance test, and not all the equipment that is tested will need to be tested annually.

#### User checks

These should be carried out by the user before it is used. Some handy points to look for are:

- Damage to the lead including fraying, cuts, or heavy scuffing, e.g. from the floor box covers.
- Damage to the plug e.g. to the cover, or pins bent.
- Coloured wires visible where the lead joins the plug (the cable is not being gripped where it enters the plug).
- Damage to the outer cover of the equipment itself including loose parts or screws.
- Signs of overheating, such as burn marks or staining/dischouring on the lead or piece of equipment.
- Equipment that has been used or stored in unsuitable conditions, such as wet or dusty environments or where water spills are possible.
- Cables trapped under furniture or in floor boxes.
- Tape applied to the lead to join leads together or cover repairs.
- The equipment is to be used in accordance with the manufacturer's instructions.
- The equipment is suitable for the job.

**It is a visual check only** - any concerns with the equipment should be reported via Planon and the equipment removed from service until it has been checked and confirmed safe to use by the Estates Department or an approved contractor.

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### Portable and moveable equipment

Portable and moveable equipment that is included in the testing regime is:

- Electrical equipment that can be easily moved around, such as kettles, vacuum cleaners, portable heaters, fans, desk lamps, audio visual equipment, PC projectors and some laboratory equipment.
- Larger items that could be moved around (but only rarely) such as water chillers, fridges and freezers, microwaves, cookers, domestic washing machines, photocopiers, vending machines, desktop computers.
- Mobile phone, laptops, and other battery charging units. However, the battery-operated equipment itself will not be tested as part of this procedure.
- Extension leads, multi-way adaptors and power connection leads for electrical equipment. Use of these should be minimised.
- Equipment fed via a fused spur will have an earth continuity test carried out as part of this procedure.

### Where Portable Appliance Tests are applicable

The University will test all portable electrical equipment used for University of Lincoln owned equipment and declared for testing prior to the date advertised internally, regardless of source.

Any portable electrical items supplied by the University of Lincoln and brought onto a University campus must be notified to the Estates Department via Planon to be added to the testing regime where necessary.

It is the portable electrical equipment owner's responsibility to inform the Estates Department of its location and approximate age.

### PAT test failure

If the piece of equipment was supplied by the school/college/area as a piece of official works equipment it will be up to the school/college/area concerned to arrange for its repair, replacement, or disposal using Planon.

Disposal methods available are,

- Smaller items (kettles/toaster but no larger) these items can be placed in the small WEEE bins situated near Court 17.
- Any IT equipment must be returned to ICT for correct disposal.
- All larger electrical items must be disposed of correctly by the school/college/area, this must be done officially via Planon. More guidance on this can be sought from the Facilities Manager (Soft Services) in the Estates Department.

If the equipment was supplied by the individual, they will be asked not to return it onto University property until such time that it has passed a PAT test.

If there is any confusion as to what gets tested when or any other queries regarding PAT, then clarification can be obtained from the Estates Department Compliance Team.

It is known that in this University that there is an abundance of specialist equipment spread around various locations, if the owner of the equipment does not want this examined by a general PAT technician then this must be communicated via email to the owner of this document and a bright red

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coloured circular sticker adhered to the plug. In this case the owner is responsible for ensuring and recoding that the equipment continues to be safe to use.

### Minor repairs

All minor repairs carried out on any equipment that has failed its PAT must be completed by an approved electrician. Once the equipment has been fixed it must be retested to ensure it passes before usage.

### Ad-hoc requests

If the equipment is less than 12 months old and has not previously been tested, then the Estates Support Desk will advise the user that this item will be picked up at the next planned visit to the building.

If the equipment is older than 12 months and has never been tested, or the test sticker indicates that it is overdue:

- If the planned PAT testing is due within the next 3 months, then the end user is advised that the testing will be picked up in the next planned and inspection, but they are encouraged to undertake their own user checks prior to use.
- If the planned PAT testing is not due in 3 months, and not IT equipment power leads, then the item/s should be PAT tested at the standard call out rate.
- If the planned PAT Testing is not due in 3 months, but the item is IT power leads, then the end user is advised that the testing will be picked up in the next planned and inspection, but they are encouraged to undertake their own user checks prior to use.

### Sub- contractor portable electrical equipment

As a sub-contractor working on University of Lincoln property it is the sub contractor's responsibility to forward annual test certificates proving compliance either on award of the contract or annually as necessary to the Estates Department Compliance Team and as part of their RAMS.

The Compliance Officer will also carry out random spot checks on individual pieces of equipment to check that they have been appropriately labelled. Failure will result in the equipment being banned from University property until tested and appropriately labelled.

### Intervals for carrying out Portable Appliance Tests

The table below shows the suggested intervals between tests, however the answer to this is reliant upon individual work conditions/characteristics which change continually.

Equipment	User check applicable	PAT test	Comments
Extra low voltage telephone equipment and low voltage desk lights (<50 volts)	Yes	No	
Desk top computers, VDU screens, Audio Visual equipment and projectors, fixed desk power leads	Yes	Every four years	Electrical leads only, not the equipment itself
Laptop computer power leads and charger	Yes	Annual	

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Domestic appliances within kitchens and accommodation blocks	Yes	Annual	
Portable power tools, battery charging units	Yes	Annual	
Photocopiers, printers, laminators	Yes	Annual	
Extension leads, multi-way adaptors and power leads for electrical equipment	Yes	Annual	
Specialist Laboratory or Engineering workshop equipment	Yes	Annual	Both faculties have authority to carry out their own testing regime which will be checked via the Estates Department via an approx. 25% (1 floor each year) check.
Stage lighting	Yes	Yes Annual	Places of public entertainment
New electrical items (straight out of box)	Yes	Not in first year	Then as per categories shown above

### Portable Appliance Testing Forecast

The PAT forecast will be communicated on the weekly Intrusive works meeting, the dedicated timetable can be sourced from the Estates Department.

### Portable Electrical Equipment not tested

Occasionally a school/college/area will arrange their own testing to be undertaken on Portable Electrical Equipment due to the sensitivity of the equipment. Therefore, it is the owner of this equipment who is responsible for testing by a competent and authorised person.

***It is known that in this University that there is an abundance of specialist equipment spread around various locations, if the owner of the equipment does not want this examined by a general PAT engineer then this must be communicated via email to the owner of this document and a bright red coloured circular sticker adhered to the plug.***

Any Portable Electrical Equipment that is taken off site is the school/college/area responsibility to ensure that the equipment is safe and tested.

School/college/area will need to arrange their equipment to be PAT tested by ensuring it is on campus the days the PAT testers are doing their department and any missed equipment should be put as a job on PLANON .

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### APPENDIX 3

#### Working safely on HV Electrical Distribution Networks

The purpose of this procedure and the Electrical Safety Rules document is to specify how the Estates Department controls and maintains its High Voltage (HV) distribution networks.

##### General

The University at the Brayford Campus has two High Voltage private networks, one on the north side, and one on the south side of the railway track.

There is also a small network on the Riseholme campus comprising two High Voltage substations and one High Voltage substation on the Holbeach campus.

Any works involving shutting down, re-energising, altering, or amending the high voltage electrical systems within our infrastructure, is undertaken, and managed by our HV approved contractor.

##### HV Electrical Substation Locations

BR Number	Name	Room location	Comment
BR001	Minerva Building	MB0251	Opposite security
BR042	Brayford Main North	n/a	External access
BR043	Brayford Main South	n/a	External access
BR003	Alfred Tennyson	GS015	External access
BR046	Student village phase 3	n/a	External access
BR047	Student village phase 2	n/a	External access
BR070	Student village phase 1	n/a	External access
BR009	Nicola de la Haye	0W52	External access
BR010	Sports Centre	0068	External access
BR083	Peter de Wint	n/a	External access
BR053	LPAC	G11	External access
BR006	University library	G35	External access
RI122	Engineering switchgear housing 1	n/a	External access
RI123	Equine switchgear housing	n/a	External access
RI124	Engineering switchgear housing 2	n/a	External access
HO-005	NCFM substation	n/a	External access
BR 101	Sarah Swift	n/a	External access
BR072	Isaac Newton	n/a	External Access
BR182	Medical School	n/a	External access
BR130	Cygnet Wharf	n/a	External access

##### Authorised Persons for HV

The University of Lincoln Authorised Roles to refer to regarding any High Voltage electricity questions are.

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- Phil Lawson
- Mark Skinner

### Duty Holders and responsibilities

In terms of the Electricity at Work Regulations the Duty Holder is clearly defined and in our case is shown below in a simple diagram format.

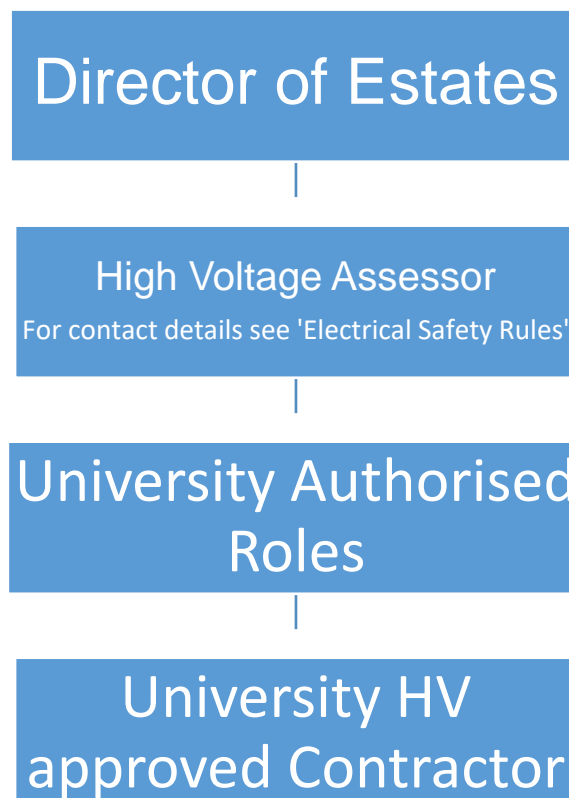
### Responsibilities

Director of Estates - The Director of Estates is the duty holder and is recognised as being responsible for all sub-stations, switch rooms and all electrical services (other than those provided by statutory authorities) including High Voltage supply to the substations or distribution boards.

The High Voltage Assessor - Is responsible for accessing and nominating engineers to the Director of Estates for University Authorised Persons and Competent Persons to carry out low voltage works in High Voltage sub-stations

University Authorised Roles - are responsible for issuing safety documentation and assessing risk assessments & method statements

In terms of the Electricity at Work Regulations the legal duty holder is clearly defined and in our case is shown below in a simple diagram,



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### Technical Definitions

High Voltage normally exceeding 1000Vac or 1500Vdc between conductors, or 600Vac or 900Vdc between conductors and earth.

### High Voltage

All substations and distribution boards operating at >1000 volts alternating current are deemed as High Voltage.

All High Voltage works, fault finding, and operational switching is undertaken and managed by the nominated High Voltage contractor. For High Voltage works and maintenance, an HV Transfer of Control will be issued to our HV contractor.

For Low Voltage works within a High Voltage substation a Limitation of Access can be issued (see PTW ECA 05)

For generic works undertaken by an Appointed Competent Person the need for a Limitation of Access is not required. Examples include meter readings, fire alarm testing and non-intrusive inspections of equipment.

The above documents can only be issued by a University High Voltage Authorised Role.

### Access to HV Substations/Distribution Boards – LV Circuits

#### Key control

The keys are not suited and are different for each sub-station area containing 11kV.

Substation access keys are held in a dedicated coded key box located in the Security Office in the Minerva Building which can be accessed by University Authorised Role or operatives approved and certified by the University High Voltage Assessor, or the University nominated HV Contractor.

High voltage switchgear keys are held in a separate coded key box located in the Security Office in the Minerva Building and can only be accessed by our nominated HV Contractor.

Sub stations are not to be left unlocked and unattended, under any circumstances.

Keys are only to be signed out from the Security Office by a University Authorised Role or a person with a valid HV Transfer of Control or Limitation of Access authorised by a University Authorised Role.

Limitation of Access are only valid daily, i.e. at the end of a working shift the LOA is to be signed off. These are issued from the Estates Department and must be returned to either the Estates Services Department office or out of hours Security Office.

All visits into a sub-station containing HV equipment are to have the logbook completed stating reason for entry.

The University does not operate a call out procedure for Estates staff, therefore out of hours emergency access is permitted to operatives approved and certified by the University High Voltage Assessor, or the University nominated HV Contractor.

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Competent persons who are approved and certified by the University High Voltage Assessor are only permitted to access sub stations to attend to any **low voltage faults**. If access is gained for this reason the Estates Department must be informed the next working day.

**Lone working is not permitted in any area containing 11kV at any time.**

### Inspections

The High Voltage distribution network is inspected annually by the University nominated HV Contractor.

Any faults or recommendations are reported to the Project Engineer for review and to put in place and necessary actions.

Should a HV power outage occur the University nominated HV Contractor are contracted to attend the Campus within one hour to start to restore the supply.