



UNIVERSITY OF OXFORD

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CODE OF PRACTICE FOR ELECTRICAL SAFETY ON LOW VOLTAGE SYSTEMS

June 2019

Review History

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1	October 2011	Code of Practice updated to include section on Withdrawal of Authorisation
2	January 2014	No changes
3	August 2016	Minor changes to wording through document
4	June 2019	Change to reflect Electrical Distribution Safety Rules

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UNIVERSITY OF OXFORD ESTATES SERVICES

CODE OF PRACTICE

ELECTRICAL SAFETY ON ALL LOW VOLTAGE SYSTEMS

1 Introduction

This Code of Practice (C.o.P.) sets out rules and requirements for work on the University LOW VOLTAGE electrical systems that are defined in the University's Safety Office Policy Statement S4/10 – "Working Safely With Electricity" as being the responsibility of the Building Estates Sub Committee (BESC). The C.o.P. also defines the extent of responsibilities for persons who have been authorised to carry out specific duties under the C.o.P. The C.o.P. does not apply to works on the Electrical Low Voltage Distribution Network. i.e it only covers electrical safety from the main incoming supply point within each building of the Functional Estate.

Electrical Safety of the network is covered by the University of Oxford Electrical Distribution Safety Rules

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The C.o.P. addresses issues of electrical safety for departmental staff, contractors and contractor's employees with regard to responsibilities of Duty Holders, authorisation (and withdrawal of) and working practice. A prime objective of the C.o.P. is to set out clear principles that are to be followed to ensure that electrical work is carried out safely, under the control of authorised competent persons to prevent risk of death or injury.

The aim throughout is to identify clear lines of demarcation and to recognize the extent of control of the electrical systems. The C.o.P. relates to working on low voltage systems only. For clarity the upper voltage limit covered by the C.o.P. is 1000 volts r.m.s 3 phase at 50Hz or 1500 volts d.c. and in line with the Electricity at Work Regulations 1989 there is no lower limit. The C.o.P. is not intended to cover situations above the upper limit.

The C.o.P. must not be read in isolation and it should not be seen in any way as a means of relieving Duty Holders of their statutory obligations. All work must be carried out in full compliance with all related legislation, requirements established in University Safety Office Policy Statements and relevant electrical regulations and safety standards.

2 Definitions

The Director	Shall be taken to read the University Director of Estates.
BESC	Shall be taken to read the Building Estates Sub Committee.
OUES	The University Estates Services
Absolute Duty	Defined under the Electricity at Work Regulations 1989 as a requirement which must be met and for which there is no defence available for failure to do so.

Isolation	Defined under the Electricity at Work Regulations 1989 as providing clear separation between conductors. It should be noted that operation of control circuits must not be relied upon for isolation.
Contractor	The term contractor applies to all parties involved in carrying out, or causing work to be done, on the system. It includes all approved contractors, consultants, designers and authorised departmental personnel.
Competent Person	<p>Competence is a specific requirement of the Electricity at Work Regulations 1989 (Regulation 16). Where ‘competent person’ is referred to in the C.o.P. it shall be taken to mean a person who has: -</p> <ul style="list-style-type: none"> i) Adequate knowledge of electricity. ii) Adequate experience of electrical work. iii) Adequate understanding of the system to be worked on and practical experience on that class of system. iv) Awareness of University Safety Office Policy Statements and of current electrical regulations and requirements appropriate to the work in hand. v) An understanding of the hazards that may arise during the work and the precautions to be taken to deal with them. vi) The ability to recognise, at all times, whether it is safe for work to continue. vii) Have in his/her possession the Handbook for “Electrical Safety” (historically known as the Blue Book) at all times when carrying out work on electrical systems as defined in the C.o.P. The Blue Book provides an on-site guide to the requirements of this Code of Practice.
Duty Holder	The individual responsible under the Electricity at Work Regulations 1989 for ensuring danger does not arise from work being undertaken on the system/s under his/her control. The Duty Holder at the University of Oxford is the Registrar.
Electrical Systems	<p>Reference to system or systems in the C.o.P. shall be taken to mean those described in the University Safety Office Policy Statement S4/10 as being the responsibility of the Director.</p> <p>These are:</p> <p>Building Electrical switch rooms Fixed electrical installation up to and including socket outlets and isolators together with light fittings and associated lighting controls and all mechanical control systems up to but not including plant equipment.</p> <p>lightning conductors, general and special earthing, and lighting of roadways, car parks, cycle and pedestrian ways.</p>

Authorising Officer The person, or persons, appointed by the Registrar to formally authorise Contractors to undertake work on the systems defined in University Safety Office Policy Statement S4/10 as being the responsibility of the Director. The Authorising Officer may withdraw or suspend the Contractor's authorisation in accordance with the procedure described in Section 3.1.

Authorised Person A person authorised in writing by the Authorising Officer to undertake certain duties in respect to specified electrical systems. An Authorised Person will be suitably qualified and be responsible for appointing, in writing, competent persons within their organisation and for ensuring their safety throughout all works. The authorisation process adopted by the Contractor shall be sufficiently detailed so as to ensure that the competent person fully understands the requirements of this C.o.P. and associated documents. The Authorised Person must have a sound understanding of the requirements of this C.o.P. and ensure all works are carried out in strict compliance to it. A certificate of appointment will define the extent of responsibilities of the Authorised Person.

The Authorised Person can be: -

- 1) An electrical contractor from the UES approved list.
- 2) An electrical consultant.
- 3) A member of the departmental electrical staff.
- 4) A member of the UES Electrical Section.
- 5) A person with managerial responsibilities who can satisfy the Authorising Officer of their competence in the role of an Authorised Person. This person shall utilise the OUES Electrical Section for the appointment of Competent Persons.

Departmental Representative Is a person nominated by the Department (Customer) to co-ordinate the works on their behalf and to identify the associated risks to those persons undertaking the work, prior to any job commencing.

Risk Assessment A risk assessment is about identifying and taking sensible and proportionate measures to control the risk, not about creating huge amounts of paperwork

3 Documentation and Appointments

Authorised Person The person who will be responsible for appointing Competent Persons.

Authorised Person Certificate A document issued by the Authorising Officer setting out the extent of responsibility of the Competent Person appointed by

them.

Competent Person	Suitably qualified and appointed in writing by the Authorised Person, and in possession of Handbook for Electrical Safety (the Blue Book).
Withdrawal or Suspension of Appointment	The Authorising Officer may withdraw or suspend the authorisation of any Authorised Person under the procedure described in Section 3.1.
Limitation of Access	A certificate from an OUES Authorised Person to give right of entry to enable persons to undertake defined tasks in areas where there is a restriction on access; for example in substations.
Transfer of System Control Certificate	Is a document designed to indicate that part, or all, of a system has been put under the control of a Competent Person who is in possession of their Blue Book.
Handbook for Electrical Safety (Blue Book)	This is a document produced by the OUES that covers the key principles set out in this Code of Practice. This is to provide on-site guidance to the competent person on the requirements of the Code of Practice. The hand book shall be signed and received by both the Authorised Person and Competent Person during induction of the Competent Person.
Permit to Work (Electrical)	A document prepared by an Authorised Person and given to a Competent Person in charge of the work to be done. Its purpose is to make the Competent Person, and everyone in the working party, aware of equipment that is safe to work on and the extent of work to be undertaken. This document generally only applies on works on the Electrical Distribution System.
Switching Schedule	A schedule of the switching operations and safety procedures that are necessary to establish safe working prior to commencing work, and which form part of the planning process.
Handbook Checklist	A checklist highlighting the key requirements of the Handbook for Electrical Safety on Low Voltage Systems produced by the University Estates Services.

3.1 Suspension or Withdrawal of Authorisation

3.1.1 In the event that an accident or incident occurs, or where unsafe\dangerous working practices or conditions are identified that result in, or have the potential for, injury to occur from the electrical system the Authorising Officer will take the following actions:

- Instant removal from site of the Competent Person and subsequent return of their Handbook for Electrical Safety.
- The Authorising Officer will inform the Authorised person in writing giving reasons for the withdrawal and recommendations regarding further action by the contractor, e.g. training and re-induction of remaining Blue Book Holders.

“Dangerous” shall be taken to mean not complying with Regulation 2 section 15 of the Electricity at Work Regulation 1989

3.1.2 A second event similar to 3.1.1 the Authorising officer may take the following action :-

- Suspend or withdraw authorisation of the designated Authorised Person. Where that Authorised Person is a Contractor that organisation shall not be permitted to undertake work on the electrical systems until authorisation is reinstated The Authorised Person shall be informed in writing of the reasons for the suspension or withdrawal of authorisation and of any further action e.g. training considered necessary before re-appointment along with the expected duration of suspension (if appropriate).

Suspension of authorisation shall be for a period determined by the Authorising Officer as appropriate for the circumstances leading to the suspension.

Reinstatement of authorisation will be subject to:

- Investigation by OUES, and where appropriate the Contractor, resulting in a report detailing the causes of the accident, incident, or unsafe working practices/conditions and the steps to be taken to prevent a recurrence;
- Implementation by the Contractor of the actions to be taken to prevent a recurrence within agreed timescales.

3.1.3 Competent person is found to have contravened a specific part of the C.o.P, but the incident is not deemed dangerous then:

- Instant removal of person, return of Blue Book. The person is permitted to work on the University system providing he/she is

supervised. This restriction shall remain in place for a minimum of 1 month.

- 3.1.4 Contractor has been found to have not complied with the principle of the COP as understood by the reporting officer.
Works will be stopped, blue book holder asked to remain offsite until the Authorising Officer has decided on appropriate action.

4 Principles for Safety in the Operation of the University LV Electrical Systems

Operation shall be taken to mean design, installation, modification, inspection, testing, maintenance or repair of systems defined as being the responsibility of BESC.

It is the policy of the University that no person shall be engaged in any work activity on, or near, live conductors (other than those adequately covered with insulating material so as to prevent danger). **For clarity working around single insulated cables are classed as working on or near live conductors.** Any system that is to be worked on must be isolated, the isolation secured and the system proved safe. Adequate working space, means of access and lighting must be provided. This policy relates to the preferred method of working that must be adopted wherever practical. It is recognised however that in certain situations testing and diagnostic work is required which may involve live work: in such circumstances the competent person in control of the work **MUST**:

- (i) Determine in each case that it is unreasonable in all circumstances to work on conductors that are dead.
- (ii) Decide whether it is reasonable in all circumstances for him/her to be at work on or near a system that is live.
- (iii) Carry out a risk assessment to identify the associated risks and to determine the safe method of working, including where necessary the provision of suitable protective equipment to prevent injury

It must be remembered that the Electricity at Work Regulations 1989 imposes an “absolute” duty in respect of “work on or near live conductors”. An “absolute duty” is one that must be carried out without making the balance of risk against time, trouble or expense of eliminating or minimising that risk.

In the event of a criminal prosecution the defendant must demonstrate that he/she took all reasonable steps and exercised all due diligence to avoid the commission of the offence.

NOTE 1 after deciding to work ‘live’ should a serious incident or accident occurs because of live working, the Authorised Person must be able to prove that adequate precautions were adopted to prevent danger. After an incident/accident there is always a probability that a criminal prosecution may ensue.

NOTE 2: There are several University Guidance’s notes available to detailing specific electrical safety items.

5 General

As stated the University policy is for work to be undertaken on systems that have been disconnected from all points of electrical energy. Isolation must be effective and secure and not capable of being defeated by inadvertent operation. Self-adhesive tape across a switch or MCB dolly is **not acceptable**. Effective isolation means disconnection of, and adequate separation between, all live conductors including the neutral conductor. Caution notices identifying the person responsible for the isolation shall always be fitted.

6 Planning

All work activities must be pre-planned and a suitable and sufficient risk assessment carried out. A safe system of work shall be developed to adequately cover the actions identified in the assessment. Clearly the extent of pre-planning needs to be relative to the nature of the work to be undertaken but the same principles apply in all cases. Prior to undertaking any work on the system, assessments shall be carried out to firstly identify related electrical risks and all measures required to control them. In addition attendant risks associated with the premises, the building user's activities and essential services shall also be identified and appropriate measures put in place.

For relatively minor works such as replacing, adding, or removing components on a final circuit, the risk assessment is likely to involve verification of the local system to establish the extent of control required: this should be accompanied by discussion with the departmental representative to determine user issues. If however, more complex works are required then it will be necessary for the contractor to take control of those parts of the system which will be affected by the works. Under these circumstances the OUES Engineer who instructed the works shall be consulted as well as Departmental Administration and Safety Representatives.

7 Control

Control of electrical danger is a fundamental element of any safety procedure and must be clearly understood by all parties involved, including Contractors, Departmental Representatives and the OUES Electrical Section. No person has authority to work on any part of the system, which is defined as being the responsibility of BESC without written authorisation from a member of the OUES Electrical Section. In effect, the control of all systems is with the OUES until the system has been formally handed over.

Handing over of control can take two forms. For relatively minor works as described earlier (which have been instructed by the OUES Electrical Section) the Contractor's risk assessment shall identify if effective isolation can be achieved on the final circuit from the local distribution board. If effective isolation can be achieved and following agreement with both the OUES Electrical Section and the Departmental Representative, work can proceed under the Contractor's control. If, however, effective isolation cannot be achieved by isolating at the local distribution board then it will be necessary for the Contractor to take control of all, or part, of the system, in this case the matter must be referred back to the person in the OUES Electrical Section who instructed the works. Covers that prevent exposure to live conductive parts must not be removed until the distribution board has been formally handed over by means of a Transfer of System Control Certificate **AND** isolated in accordance with the relevant isolation procedures. The extent of control required to ensure safe working must be agreed with the OUES Electrical Section. The nature of the work to be undertaken will, in the main, determine the level of control required. The handover may involve just a single distribution board; alternatively it could extend up to a complete installation.

The OUES Electrical Section will issue the Transfer of System Control Certificate to a Contractor (Blue Book Holder) together with sufficient records of the systems. On receipt of the Transfer of System Control Certificate, the Contractor shall immediately install caution notices on equipment to clearly identify the extent of the transfer and fit locks as necessary to secure control. Caution notices shall identify the address and

daytime telephone number of the Contractor together with 24 hour contact details in the event of an emergency.

For the period of transfer, control of the system is with the Contractor. The Contractor is responsible for appointing a Duty Holder to set up safe working procedures and for ensuring Competent Persons are engaged for the duration of the works. The safe system of work shall recognise the need to use Permits to Work where appropriate. Where supplies have to be isolated to establish a safe site, the impact of such isolation must be assessed PRIOR to disconnection to avoid the risks associated with secondary dangers. The assessment must include the OUES Electrical Section and the departmental representative concerned. The Duty Holder must also take into account the provision of any temporary supplies for essential services to users and those associated with the works e.g. temporary lighting.

Where complex switching operations are required there may be a need for switching schedules. Procedures to be recognised in Switching Schedules include the receipt and clearing of Transfer of System Control Certificates, issue and cancellation of Permits to Work, identifying means of secure isolation and the fitting of caution notices, etc. Switching Schedules shall be used for all works where 3 or more switching and restoration sequences are required. Switching Schedules will be prepared in advance of any work by a member of the OUES electrical section.

Any defect identified which could affect the safety of a person, or the integrity of the system, must be brought to the attention of the OUES Electrical Section. It is anticipated that the initial report will be verbal: this will be followed up in writing giving full details of the defect and the remedial action taken for circumstances where the defect created significant risk from the electrical system. For instances where the risk is not significant a record of the defect shall be made together with details of the remedial actions taken.

On completion of the works, the Transfer of System Control Certificate must be cleared by the Contractor and returned to the OUES Electrical Section for cancelling. The clearance is to confirm that all caution notices, locks, equipment and tools have been removed and that it is safe to return the system to the control of the OUES. It is the responsibility of the Contractor to ensure that the certificate is cleared and to keep a record that it has been returned for cancellation. The OUES Electrical Section will provide confirmation to the Contractor that the Transfer of System Control Certificate has been cancelled and that the system has been returned to OUES control.

Until the certificate has been cancelled the system will remain under the control of the Contractor. It is essential that all test data and suitably annotated record information is available and returned to OUES before the Transfer of System Control Certificate can be cancelled. The system will remain the responsibility of the contractor until the information is provided to the OUES Electrical Section in a satisfactory standard. The provision of record information detailing the work carried out is a fundamental part of the process to enable systems to be taken back under OUES control.

It should be noted that no circuit should be made available for use until it has been fully completed and inspected and tested in accordance with BS7671 including checks to ensure that earthing arrangements and protective conductors (including main protective bonding conductors) are in place; and

Any circuit that is incomplete or has yet to be fully inspected and tested must remain securely isolated at the supply end.

8 Records

The OUES Electrical Section has and maintains a comprehensive record of the electrical systems under its control. In general, records take the form of block schematics and circuit charts for installations within buildings and operational schematics for external networks. The records are kept in both hard copy - paper - and electronic form. The Contractor must always submit details of any changes that have occurred on completion of the works to the OUES Electrical Section along with any test and inspection certificates required for compliance with BS7671.

9. Excavations

The areas in which the OUES has underground cables are heavily serviced and include; water, gas, drainage etc., as well as University and Electricity Company cables. No excavation works may be undertaken until records have been checked and the works approved by the OUES Electrical Section.

10 Working in University Buildings

On arrival all persons must report to the Departmental Representative who will be identified by the person in the OUES Electrical Section who instructed the works. Those persons undertaking work need to be made aware of any hazards in the area of the work, and agree the procedures and any specific controls that may be required, for example, where access is needed to containment or chemical laboratories, or other restricted areas of the department. Additionally, Contractors must be aware of departmental arrangements for booking in on entry, emergency procedures in case of fire or evacuation, and the requirement and arrangements for reporting accidents, incidents and obtaining first aid.

The person in the OUES Electrical Section who instructed the works is responsible for bringing to the attention of the Contractor the possible presence of asbestos containing materials (ACMs) in any areas where the Contractor will work, by consulting the relevant Asbestos Register or the University's Asbestos Coordinator. In addition, the Contractor is expected to liaise closely with the relevant Departmental Representative and the OUES contact to ensure that concerns are reported promptly and, if necessary, the work is halted for further investigation. Departmental electricians must also be aware of the potential presence of ACMs where they work by consulting the same sources of information, and work in compliance with the University's policy on asbestos, UPS S9/10.

11 Design

Those involved in the design of electrical systems must take into account the health and safety implications that may arise through their design. In addition to making provision for those who install the systems initially, designers must give due allowance to those who will use, maintain, repair, modify or remove any part of the system.

Under health and safety regulations the designer must have regard to a number of issues. Those issues may not be directly concerned with the system 'hardware' but may affect those working on the system. Matters to be considered are: - working space, means of access and lighting.

12 Test Equipment

The minimum standard for test equipment to be used by competent persons working on the electrical system is that set down by the Health and Safety Executive in their Guidance Series reference GS38. Anyone required to use test equipment must be familiar with GS38 or where necessary be adequately supervised.

It is an absolute duty under the Electricity at Work Regulations 1989 that protective equipment, which includes test equipment, must be (a) suitable for use, (b) maintained in a condition suitable for that use and (c) properly used.

13 Monitoring

The OUES Electrical Inspector will monitor the activities of those undertaking work on the electrical systems that are the responsibility of BESC. It should be clearly understood that this is not a supervisory position: it is the duty of persons in control of the system to supervise those working upon it.

Access shall be provided for the Electrical Inspector to inspect the works: any unsafe working practice or unsafe condition observed by the Electrical Inspector will be brought formally to the OUES Electrical Section's attention. This may result in the suspension or withdrawal of the Competent Person or of authorisation as described above.

This is not intended to be an exhaustive document setting out all requirements for every situation but more to identify general principles that are to be followed. In the event of doubt on any issue relating to electrical safety, the matter must be referred to the OUES Electrical Section PRIOR to any work going ahead. In all cases there must be effective risk assessment of the activity along with clear understanding of who is responsible for the safety of those working on the system and for those who may be affected if the supply is lost either intentionally or unintentionally.

It should be noted that this document has been prepared to assist those working on the OUES electrical systems comply with the requirements of the Electricity at Work Regulations 1989 and that any deviation from the requirements described herein may be in contravention of those Regulations.

Appendix 1

Safety Requirements

This Code together with the Regulations listed below set out the minimum standards for safe working in the University:

- i) The Electricity Safety, Quality and Continuity Regulations 2002.
- ii) The Electricity at Work Regulations 1989. (HSR25)
- iii) The Low Voltage Electrical Equipment (Safety) Regulations 1994.
- iv) The Electrical Equipment (Safety) Regulations 1994.
- v) The Construction (Design and Management) Regulations 2007.
- vi) The Management of Health and Safety at Work Regulations 1999.
- vii) The Health and Safety at Work etc. Act 1974.
- viii) The Provision and Use of Work Equipment Regulations 1998.
- ix) Requirements for Electrical Installations BS7671 (latest edition).
 - x) Safety in electrical testing at work (INDG354
 - xi) Electricity at Work (HSG85)
 - Xii) Guidance on the management of electrical safety and safe isolation procedures for low voltage installations.

Further Guidance

Control Panels Design Guide

The Engineering Equipment and Materials Users Association (EEMUA)

Appendix 2

OUES Procedural Documents

Authorised Person Certificate
Transfer of System Control Certificate
Limitation of Access Certificate

ISSUE No.....

UNIVERSITY OF OXFORD

University Estates Services

APPOINTMENT OF AUTHORISED PERSON

1 ISSUE

Name:

Is hereby appointed an Authorised Person in accordance with the University Estates Services Code of Practice - Electrical Safety on LV Systems and is authorised to carry out work according to the schedule below.

THIS APPOINTMENT IS VALID FOR A MAXIMUM OF TWO YEARS BUT MAY BE SUSPENDED OR WITHDRAWN AT ANY TIME BY THE AUTHORISING OFFICER

Signed.....Time.....Date.....

Authorising Officer

2 SCHEDULE

In respect of the following systems

- a) To appoint in writing and issue the Handbook for Electrical Safety to Competent Persons within their organisation to carry out work on University Fixed Electrical system as defined in the OUES Code of Practice.
- b) To enter Low Voltage sub stations.
- c) To issue and cancel Transfer of System Control Certificates on LV systems.
- d) To instruct and supervise competent persons to carry out work on the University Fixed Electrical system as defined in the OUES Code of Practice.
- e) To issue Limitation of Access Certificates.

N.B. This is not an authority to carry out work or switching on any apparatus or switchgear belonging to the District Network Operator.

3 ACCEPTANCE

I hereby accept appointment as an Authorised Person and will carry out work listed in the Schedule above. I have read, understood and retain in my possession a copy of the University Director's Office Code of Practice – Electrical Safety on Low Voltage Systems and undertake, to the best of my ability, to carry out all work fully in accordance with the Electricity at Work Regulations 1989.

Print Name Sign.....

Date Time

4 SUSPENSION/WITHDRAWL * (* delete that which is not applicable)

This appointment is hereby suspended/withdrawn * and the Authorised Person has been instructed to carry out no further work on electrical systems until a new Certificate of Appointment has been issued.

Print NameSign

Date.....Time.....

N.B: This document is not intended to be an exhaustive description of the work carried out by Authorised Persons nor should it be interpreted as such. Its purpose is to provide evidence of appointment as an Authorised Person.

Top copy – File Second copy – Authorised Person Third copy – Pad

ISSUE No.....

UNIVERSITY OF OXFORD

University Estates Services
The Malthouse, Tidmarsh Lane
Oxford, OX1 1NQ

TRANSFER OF SYSTEM CONTROL CERTIFICATE

1. ISSUE

(a) I hereby declare that the control of the following part/s of the University electrical system
.....
.....

(b) has been transferred to:
Address

(b) for the purpose of carrying out the following work.....
.....
.....

The points of connection to the University electrical system are:
.....

Further information which may be required in order to establish a safe system of work.....
.....

Print Name..... Sign.....
Time..... Date

Being the person authorised to issue a Transfer of System Control Certificate.

2 RECEIPT

I accept the responsibility on behalf of
as the Duty Holder for the electrical dangers on the system/s scheduled in Section 1(a) above. I also accept responsibility for the setting up and the enforcement of safe working procedures and the control of the dangers associated with the work detailed in Section 1(c) above and shall ensure that the works are carried out by competent persons having the necessary skills and experience and who have been made familiar with the 'University Code of Practice - Electrical Safety on LV Systems'
Before commencing any work on the transferred part of the system the Duty Holder shall post CAUTION LABELS at all points of connection of the electrical supply. In addition labels shall be placed on all distribution board included in the Transfer of System Control Certificate: these are to indicate the name and address from Section 1(b) above, the name of the Duty Holder as Section 2 and telephone number/s giving 24 hours emergency contact cover.

Print Name Sign.....
Time Date

3 CLEARANCE

I hereby declare that the work for which this Transfer of System Control Certificate was issued is now suspended/completed, and that the persons under my charge have been withdrawn and will carry out no further work on the system and that all gear and tools are clear. I also declare that the transferred part of the electrical system has been properly tested and is safe to energise. All relevant updated documentation, drawings or schematics are available to OUES Electrical Section.

Signed Time Date

4 CANCELLATION

This Transfer of System Control Certificate is now cancelled and that the parts of the University electrical system/s listed under 1(a) are now under OUES Electrical Section control.

Signed Time Date

Being a person authorised to cancel Transfer of System Control Certificates.

Top Copy-Duty Holder Second Copy-File Third Copy-Pad

ISSUE No.....

UNIVERSITY OF OXFORD

University Estates Services
The Malthouse, Tidmarsh Lane
Oxford, OX1 1NQ
Tel: (01865) 241654

LIMITATION OF ACCESS CERTIFICATE

This form **MUST NOT** be used on apparatus for which an Electrical Permit-to-Work is required.

1. ISSUE

To.....

In the employ of

Is hereby given permission to carry out the work described below:-

Location

Work

.....

NO OTHER WORK SHALL BE CARRIED OUT

Print Name.....Sign.....

Time.....Date

Being a person authorised to issue Limitations of Access.

2. RECEIPT

Print NameSign.....

TimeDate

Being a person to whom this Limitation of Access is issued.

3. CLEARANCE

I hereby declare that the work for which this Limitation of Access was issued is now suspended/completed and that all persons and equipment under my control have been withdrawn.

Print Name.....Sign.....

TimeDate

Being the person to whom this form was issued.

4. CANCELLATION

This Limitation of Access is hereby cancelled.

Print Name.....Sign

Time.....Date

Being a person authorised to cancel this Limitation of Access.

N.B. On completion of the work the holder must surrender this Limitation of Access as directed for cancellation, after which no work shall be done.

Appendix 3

Sample Documents

Permit to Work
Switching Schedule
Handbook Checklist

The above documents are provided as examples and they are not to be interpreted as OUES documents that the contractor is to adopt.

PERMIT TO WORK ON ELECTRICALLY DISCONNECTED EQUIPMENT

1. DETAILS OF APPARATUS AND WORK/TEST TO BE CARRIED OUT.

..... Contract No:

 Location:

PRECAUTIONS

1. DISCONNECTION (State where & how disconnected)
 2. WARNING NOTICES AND ACCESS CONTROL (State where displayed).....
 3. PROVE APPARATUS DEAD (State what test made)
 4. EARTHING (State where apparatus earthed).....
 5. SAFETY LOCKS FITTED (Specify).....
- OTHER PRECAUTIONS (Specify)

VALIDATION PERIOD

This permit is valid from hours on
 I hereby declare that the above precautions have been taken and made known to the Competent Persons in charge of the work. I consider that the equipment specified in Paragraph 1 is safe to work on.

Print Name.....Sign Authorised person
 Date..... Time

ACCEPTANCE AND RECEIPT BY A COMPETENT PERSON

I acknowledge receipt of this permit and understand the safety precautions described above. Neither I nor the persons under my control will work on any other electrically dangerous equipment. I will return this permit to the authorised person when work is complete.

Print Name.....Sign Competent person
 Date..... Time

CANCELLATION

I hereby declare that the work detailed in paragraph 1 has been completed/stopped, earths removed and tools/gear withdrawn. The apparatus is now in a safe condition.

Print Name.....Sign Competent person
 Date..... Time

I hereby declare this permit cancelled. The top copy has been returned to me by the Competent Person. The apparatus detailed in paragraph 1 may be reconnected for service.

Print Name.....Sign Competent person
 Date..... Time

SWITCHING SCHEDULE

1	PURPOSE OF SWITCHING	
2	EQUIPMENT TO BE WORKED ON	
3	START DATE	
4	PREPARED BY PRINT SIGN DATE	CHECKED BY PRINT SIGN DATE

SCHEDULE OF EVENTS					
Item	Location	Operation	Equipment and/or special instructions	Date and time of operation	Operator
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

UNIVERSITY ESTATES SERVICES OXFORD
HANDBOOK FOR ELECTRICAL SAFETY
LOW VOLTAGE SYSTEMS

The following checklist highlights the key requirements of the Handbook for Electrical Safety for Low Voltage Systems produced by the University Estates Services.

The column on the left indicates the section in which further details of the requirement may be found.

Before going to site check the following requirements:-

Handbook clause number	Requirement	Yes	No
4.1	Be in possession of the proper tools and equipment and the appropriate personal protective equipment.		
4.2	Have the name and location of the Departmental Representative/Contact with whom you are to meet and at what time.		
4.5	That you have sufficient details to safety carry out your work:- <ul style="list-style-type: none"> • Relevant risk assessments • Adequate record information • Permit to Work forms (where required) 		
5.2	That you have details of the extent of the system control required to carry out your works safely.		

On arrival at site:-

Handbook clause number	Requirement		
4.2	Report to reception and give the name of the Departmental Representative/Contact with whom you are to meet.		
4.2	Obtain from the Departmental Representative/Contact details of:- <ul style="list-style-type: none"> • Signing in/out • Emergency evacuation • Accident/incident reporting • Hazards and risks on site e.g. the possible presence of asbestos containing materials 		
4.2	Advise the Departmental Representative/Contact of the affect of your works on the department.		
4.2	Give reasonable notice for the disconnection of electrical supplies required to achieve safe working. Obtain agreement from the Departmental Representative for the disconnections.		

Before commencing any work it must be clearly understood who has control of the electrical system to be worked on therefore:-

Handbook Page/ ref	Requirement	Yes	No
5.2	Where appropriate take formal control of the system as Duty Holder by receipt of a Transfer of System Control Certificate.		
4.3	Isolate the system, secure the isolation and prove safe to work on.		
4.4	If you are carrying out diagnostics or testing follow the procedure in the handbook.		
5.3	Report any defect to the Authorised Person who instructed you to carry out the works.		
5.4	Remove caution notices, locks, tools and equipment and ensure the system is safe to return to UED control. This must include carrying out any electrical testing required to demonstrate that the system is safe to operate		
5.4	Upon completion of the works sign off the Transfer of System of Control Certificate as Duty Holder and promptly return it to the Authorised Person who issued it.		
5.4	Ensure that test certificates and amendments to record information are promptly made available to the U		
6.1	Maintain a clean and tidy site and remove waste materials and redundant packaging on a regular basis.		
6.2	Before commencing any excavation work ensure that approval has been given by the UED.		
7	Co-operate with the UED Electrical Inspector in his monitoring role.		

If at any time you are unsure about what you are expected to do, or the circumstances in which you are working under to the extent that your health and safety, and/or that of others may be put at risk,

STOP WORK AND REPORT TO THE AUTHORISED PERSON WHO INSTRUCTED YOU.

HANDBOOK FOR ELECTRICAL SAFETY

This document outlines the use of the 'HANDBOOK FOR ELECTRICAL SAFETY' (Blue Book). This Book is the pocket version of the University Code of Practice (C.o.P): Electrical Safety on Low Voltage Systems which was issued to you following the signing of appointment of Authorised Person. The C.o.P. itself outlines the purpose and use of the Blue book along with the rules and requirements for work on the University Low Voltage System; however it has been noted that some contractors are still not fully conversant with its contents and as such I would ask that you reread the C.o.P. in conjunction with the items 1-8 below.

- 1: It is intended that the Blue Books shall only be issued to those competent persons likely to carry out work on the University fixed electrical system. (Code of Practice, Page 5 Part 3)
- 2: At least one Blue book carrying competent person shall be on site at all times during work on the fixed electrical installation. (Code of Practice, Page 4, Item vii)
- 3: Blue Books are NOT transferable. If the owner of the Blue book leaves the company the book is to be returned to the University Estates Services (UED).
- 4: The Blue books are the property of the University and shall not be copied or duplicated in any manner. Each issued copy shall be signed by the competent person, the name and associate book number shall then be passed to the UED for recording purposes.
- 5: The Contractors Authorised person as appointed by the UED shall be responsible for issuing the Blue Book (free issue) to the competent persons. (Code of Practice Page 5 Item 3)
- 6: The contractor is responsible for making sure that all its staff working within the University are fully aware of the contents of the Blue Book.
- 7: The Transfer of Control document will only be issued to the competent person in possession of the Blue Book
- 8: Any member of the University Electrical Section may ask to see the Blue Book at any time.

Failure to meet any of the above requirements and those outlined in the C.o.P. may result in the removal from site of all your personnel

If there are any further queries please contact the UED

UNIVERSITY OF OXFORD – ESTATES SERVICES

Code of Practice – Electrical Safety on Low Voltage Systems

Authorised Persons Questionnaire

When the person signs to accept the appointment as an Authorised Person they must be able to demonstrate their understanding of the Code of Practice – Electrical Safety on Low Voltage Systems, This may be confirmed by the following questions

Name..... Organisation

- 1. What system does the Code apply to?
University fixed wiring system
.....
- 2. What is the prime objective of the code?
Safe working practices
.....
- 3. How will the authorized person appoint competent persons to work on University fixed wiring system
Induction and in writing (Blue Book)
.....
- 4. What must the competent person in charge of the work consider BEFORE working on live systems?
Should it be live!
.....
- 5. What activity should occur prior to any work commencing
Preplanning and risk assessment
.....
- 6. What is the purpose of the Transfer of System Control document and what responsibilities does it place on the contractor?
Transfer of System, Duty Holder
.....
- 7. What is the purpose of GS38 : Electrical Test equipment used by electricians?
Guide to safe use of test equipment
.....
- 8. Can you explain the purpose of the University’s labeling and record system as outlined in the CoP?
Identification to enable safe control
.....
- 9. What are the minimum requirements that a Contractor must provide to enable a system to be handed back to the University
Sufficient information and test sheets
.....
- 10. What is the purpose of the Handbook (Blue Book)?
On site guide to CoP
.....

Completed by..... DatePad Nos.....
Comments : See over