


ESTATES and CAMPUS SERVICES PROCEDURE			 UNIVERSITY OF LINCOLN
Subject: WORKING SAFELY ON HV ELECTRICAL DISTRIBUTION NETWORKS	ECS30	Rev.2	
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1.0 PURPOSE

The purpose of this procedure is to specify how the University of Lincoln controls and maintains its High Voltage (HV) distribution networks.

1.1 High Voltage 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	MHT	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	AAD West	0W52	External access
BR010	Sports centre	0068	External access
BR083	AAD East	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***	NCFM substation	n/a	External access

2.0 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.

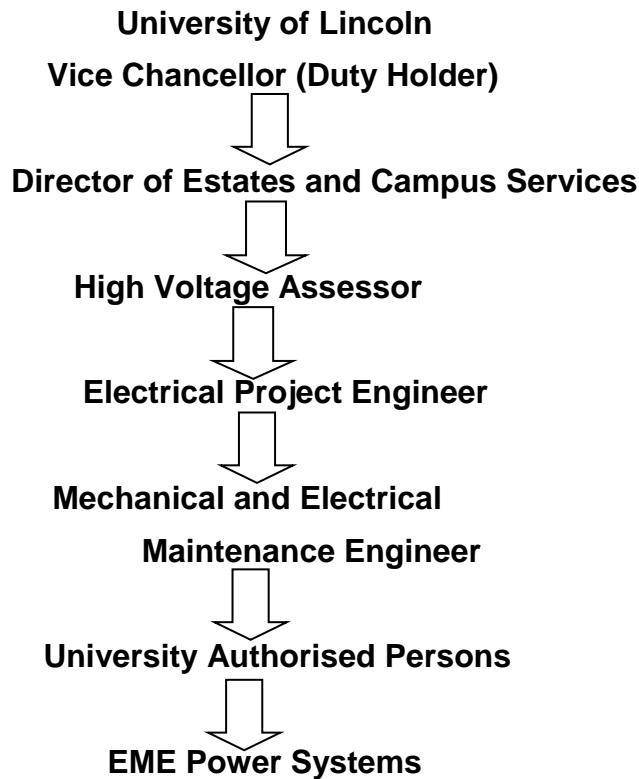
There is also a small network on the Riseholme campus comprising two High Voltage substations and one High Voltage substation on the Holbeach campus.

The University of Lincoln, Authorised Persons to refer to regarding any High voltage electricity questions are;

- Phil Lawson Ext 6479
- Paul Metcalf Ext 6056

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

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3.0 TECHNICAL DEFINITIONS

'High voltage' normally exceeding 1000 V ac or 1500 V dc between conductors, or 600 V ac or 900 V dc between conductors and earth.


4.0 RESPONSIBILITIES

4.1

The Vice Chancellor is the High Voltage Duty Holder

4.1

The Director of Estates and Campus Services is recognised as being responsible for the 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.

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4.2

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

4.3

The University Authorised Person is responsible for issuing Safety Documentation and assessing risk assessments & method statements.

5.0 HIGH VOLTAGE

All substations and distribution boards operating at >1000volts alternating current are deemed as High Voltage and as such a specific High Voltage Logbook/Procedure & University of Lincoln High Voltage Electrical Safety Rules has been published separately for all works within these areas.

All High Voltage works, fault finding and operational switching is undertaken and managed by the nominated High Voltage contractor EME Power systems.

For High Voltage works and maintenance an HV Transfer of Control will be issued to EME Power Systems.

For Low Voltage works within a High Voltage substation a Limitation of Access can be issued.

The above documents can only be issued by a University High Voltage Authorised Person currently Phil Lawson, Paul Metcalf, Mark Skinner, Simon Crampton, Claire Collier or Chris Broome.

6.0 ACCESS TO HV SUBSTATIONS/DISTRIBUTION BOARDS – LV circuits

6.1


Key Control

The keys are not suited and are different for each sub-station area containing 11000v.

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 Persons or Operatives approved & certified by the University High Voltage Assessor, or the University nominated HV contractor EME Power Systems.

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 EME Power Systems.

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

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6.2

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

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

All visits into a sub-station containing high voltage equipment are to have the log book completed stating reason for entry.

6.3

The University does not operate a call out procedure for Estates staff, therefore out of hours emergency access is permitted to Operatives approved & certified by the University High Voltage Assessor, or the University nominated HV contractor EME Power Systems. Operatives approved & certified by the University High Voltage Assessor are only permitted to access sub stations out of hours 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 11000v at any time.

8.0 INSPECTIONS

The High Voltage distribution network is maintained annually by the University nominated HV contractor EME Power Systems.

Any faults or recommendations are highlighted in the annual report.

Should a High Voltage power outage occur the University nominated HV contractor EME Power Systems are contracted to attend the Campus within 1 hour to start to restore the supply.