Safety Rules and Procedures for

High Voltage Electrical Systems

Revision 2.0

May 2017

Compass Safety Rules and Procedures for High Voltage Systems	
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Contents

1 Introduction

1.1 General

This document sets out the High Voltage (HV) Safety Rules and Procedures (herein after abbreviated to "these Rules") relating to:

(i) Working on our near, and the operation of High Voltage electrical equipment, systems and installations.

(ii) The responsibilities for the control of the electrical danger.

(iii) The appointment of the Authorising Engineer, Senior Authorised Persons, Authorised Persons, Competent Persons and Safety Persons.

(iv) The qualifications and training necessary for the appointment of the Authorising Engineer, Senior Authorised Persons, Authorised Persons, Competent Persons.

(v) The documentation for the application of these Rules.

These Rules have been drafted to ensure compliance with UK statutory requirements and to prevent, so far as reasonably practicable, danger arising from working on, working near, testing or operating High Voltage electrical equipment and systems.

1.1.1 Policy on Electrical Safety

Our aims are to install, maintain and operate High Voltage electrical systems to the highest safety standards.

The consequence of undertaking electrical maintenance and/or switching operations can adversely affect the client, therefore, appropriate consultation must take place well in advance of any electrical work.

There is a legal obligation on all persons involved with the operation of, and work on electrical systems and equipment to carry out work in such a way as to prevent danger and injury to themselves and/or others.

These Rules have been put in place to assist in carrying out these obligations.

1.2 Application of these Rules

1.2.1 General

These Rules are mandatory for all persons (whether or not directly employed by Compass Group) working on, working near, testing or operating High Voltage electrical equipment and systems for which Compass Group has control of the electrical danger.

These Rules are designed to provide a safe framework within which work or testing can be carried out with safety on permanently connected electrical equipment (equipment which has been isolated via a switch or disconnector is considered to be permanently connected). These Rules do not apply to equipment that has been disconnected and discharged of any electrical potential and removed from an installation.

In case of apparent conflict between these Rules and a statutory requirement, the latter is to be followed and the Authorising Engineer is to advise Senior Management.

If it is necessary to depart from any requirement of these Rules, the Authorising Engineer is to agree such departure in writing with the Senior Management before it is implemented.

Where the control of the electrical danger is divided between Compass Group and others, Section 1.5 of these Rules is to be applied.

Further advice on the application of the Rules can be obtained from the Authorising Engineer.

1.3 Definitions of Personnel

1.3.1 Duty Holder

A person on whom the Health and Safety Legislation, including The Electricity at Work Regulations 1989 imposes a duty in connection with Safety.

1.3.2 Co-Ordinating Authorising Engineer

A person appointed, in writing, by the Duty Holder to take responsibility for the overall management of these Rules.

1.3.3 Authorising Engineer (HV)

A person appointed, in writing, by the Co-Ordinating Authorising Engineer to take responsibility for the effective management of these Rules.

1.3.4 Senior Authorised Person (HV)

A person appointed, in writing, by an Authorising Engineer, in accordance with these Rules, to be responsible for the implementation of these Rules, in respect of the control and operation of defined High Voltage electrical systems including the issue of all Safety Documents. This person is also responsible for liaising between the Authorising Engineer and the Authorised Persons.

1.3.5 Authorised Persons (HV)

A person appointed, in writing, by an Authorising Engineer, in accordance with these Rules, to be responsible for the implementation of these Rules, in respect of the control and operation of defined High Voltage electrical systems including the issue of all Safety Documents.

1.3.6 Duty Authorised Person (HV)

An Authorised person who has signed the HV Log Book to accept responsibility for the HV system or installation, their name must be displayed in the HV System Control Centre.

1.3.7 Competent Person (HV)

A suitably trained person who has sufficient technical knowledge and experience to avoid any danger that electricity may create, has sufficient knowledge of these Rules and is suitable to carry out specific work activities on the types of installations, equipment and locations indicated on their Safety Document or Certificate of Appointment.

1.3.8 Safety Person

A person not involved in the work or test, who has received Emergency First Aid training and who has adequate knowledge, experience and ability to avoid danger, keep watch, prevent interruption, apply First Aid and summon help. The person is to be familiar with the system or installation being worked on or tested and is to have been instructed on the action to be taken to disconnect the equipment in the event of an accident.

1.4 General Definitions

1.4.1 Confirm Dead

Demonstrate with the use of approved test equipment, designed for the purpose that no electrical potential liable to cause danger is present, carried out by out after issuing Safety Documentation.

1.4.2 Danger

Risk of injury or death.

1.4.3 Dangerous Condition

A condition that is likely to lead to a Dangerous Occurrence.

1.4.4 Dangerous Occurrence

An incident, involving a source of electrical energy, which may be dangerous to any person, whether or not an accident has occurred.

1.4.5 Earthed

Connected to the general mass of earth in such a manner as will ensure at all times an immediate discharge of electrical energy without danger.

(i) **Circuit Main Earth:** A safety earthing connection of an approved type, secured where practicable by a Safety Lock, applied by an Authorised Person and its position recorded before the issue of a Safety Document.

(ii) **Additional Earth:** Earthing equipment of an approved type applied after the issue of a Safety Document (for example an earth applied at the point of work).

1.4.6 Electrical Equipment

Anything used, intended to be used or installed for use, to generate, transmit, transform, rectify, convert, distribute, control, store, measure or use electrical energy.

1.4.7 HV System Control Centre

An area under control of the Senior Authorised or Authorised Person which contains the Mimic Diagram and Key Cabinet for the HV System.

1.4.8 High Voltage Enclosure

A Location within which a live High Voltage conductor is, or can be, exposed without the use of a tool or key.

1.4.9 Injury

Death or personal injury from electric shock, electric burn, electrical explosion or arcing, or from fire or explosion initiated by electrical energy, where such death or injury is associated with the generation, provision, transmission, transformation, rectification, conversion, conduction, distribution, control, measurement or use of electrical energy.

1.4.10 Isolate

Disconnect and separate electrical equipment from every source of electrical energy in such a way that this disconnection and separation is secure.

1.4.11 Isolation and Earthing Diagram

A diagram which forms part of the Permit to Work or Sanction for Test illustrating the safety measures taken.

1.4.12 Key Cabinet

A cabinet for the sole purpose of retaining all keys relative to the Site HV System to which the Authorised Person(s) have control.

1.4.13 Key Control Box

A single locked box used for the control of the key to the Key Cabinet.

1.4.14 Key Plate

A key fob, or similar, with the ability to hold all the keys a specific Sub-Station and its associated Switchgear.

1.4.15 Live

The presence of an electrical potential: (electrically charged).

1.4.16 Lockable Document Cabinet

A lockable cabinet suitable for the storing of electrical safety documents, temporary safety signs, etc. used in the application of these Rules. This cabinet shall not be used to store anything not associated with these Rules. The key for this cabinet will be retained in the key cabinet when not in use.

1.4.17 Log Book (HV)

A book in which all matters to relating to the condition of the electrical system should be recorded. Including all switching operations, application of circuit main earths and issuing of any safety documentation.

1.4.18 Mimic Diagram

A single line diagram of an electrical distribution system so made that the symbol for each item of switch gear may be adjusted to indicate the On Off or Earthed positions.

1.4.19 Operational File (HV)

A file in which all completed Switching Schedules, Permits to Work, Sanctions for Test, Method Statements and Risk Assessments are held.

1.4.20 Operational Restriction

A written safety instruction, issued by the Authorising Engineer, modifying or prohibiting the normal operating procedures associated with a particular make and type of equipment.

1.4.21 Proprietary Earthing Equipment

Earthing equipment of an approved type applied after isolation, of a circuit or equipment, to allow an item of equipment or cable to be earthed.

1.4.22 Proprietary Isolation Equipment

Equipment fitted at a Point of Isolation to allow Safety Locks and Caution Signs to be affixed.

1.4.23 Protective Equipment

Equipment used to protect persons from danger in the working environment. Protective equipment includes such items as special tools, protective clothing, insulating screens, safety harnesses, temporary signs, etc.

1.4.24 Proved Dead

Demonstrate with the use of approved test equipment, designed for the purpose, that no electrical potential liable to cause danger is present.

1.4.25 Safety Lock

A padlock, uniquely identified and having a single key that differs from other keys provided for the system or installation, used for securing the means of isolation and to prevent the removal of Circuit Main Earths.

1.4.26 The Safety Key Box

A box having two locks, each of which is to have only one key, one being labelled “Safety Key Box – Competent Person”, and the other “Safety Key Box – Authorised Person”. It is to be so arranged that both locks must be released before access can be gained to the contents of the box.
The box is to be used for the safe retention of the keys to Safety Locks.

1.4.27 Safety Signs

Caution Sign
A sign bearing the word “caution” which also has the appropriate picot-graphical symbol to be used at points of isolation (Model Sign P5).

Danger Sign
A temporary sign bearing the word “danger”, “equipment beyond this point still live” which also has the appropriate picto-graphical symbol to be used where there is adjacent live equipment (Model Sign P4).

Point of Work Sign
A temporary sign bearing the words “Point of Work”, and a Green Cross. To be used to positively identify the Point of Work (Model Sign P6).

Warning Signs
These are permanent signs, (as per Appendix 3.1 – 3.3), indicating the presence of an electrical hazard within an area or enclosure.

1.4.28 Safety Documents

Permit to Work (High Voltage)
A written authority, issued by the Duty Authorised Person for the work to be undertaken on defined HV electrical equipment.

Sanction for Test (High Voltage)
A written authority, issued by the Duty Authorised Person for testing to be undertaken on defined HV electrical equipment.

Limitation of Access (High Voltage)
A written authority, issued by the Duty Authorised Person allowing a named person to enter and carry out specified tasks (which do not require the issue of a Permit to Work or Sanction for Test) in a HV sub-station or any other location which is under the control of an Authorised Person (HV).

1.4.29 Single Line Drawing
A schematic drawing or set of drawings of the whole site system showing all HV and major LV equipment in its normal state of operation.

1.4.30 Spiking Gun
An item of safety equipment used to confirm that a cable is dead at the point of work.

1.4.31 Sub-Station
Any premises or part thereof, which contain equipment for either transforming or converting electrical energy to or from High Voltage (other than transforming or converting solely for the operation of switching devices or instruments), or the switching, controlling or regulating energy at High Voltage.

1.4.32 Sub-Station Warning Sign
A permanent sign bearing the words “Danger of Death”, or a combined Warning Sign and notice. The relevant voltage, if in excess of Low Voltage shall be declared below the words “Danger of Death”. Model Sign P1.1

1.4.33 Supervision

Immediate Supervision

Supervision given by a person, having adequate technical knowledge and experience, who is available and attends the work as necessary.

Personal Supervision

Supervision given by a person who is present at all times.

1.4.34 Switching Schedule

A written schedule, as shown in Appendix A2.1 compiled by an Authorised Person and countersigned by a second Authorised Person, setting out the sequence of operations to be followed before a Permit to Work or Sanction for Test is issued.

1.4.35 System

An electrical system in which all the equipment is, or may be, connected to a common source of electrical energy, including the source and its associated equipment.

1.4.36 Voltage Ranges

Extra Low Voltage

A potential not exceeding 50 volts ac or 120 volts ripple free dc, whether between conductors or to earth.

Low Voltage (LV)

A potential not exceeding 1000 volts ac or 1500 volts dc between conductors or 600 volts ac or 900 volts dc between conductors and earth.

High Voltage (HV)

A potential normally exceeding Low Voltage

1.4.37 Working Lock

A padlock, having a single key that differs from other keys provided for the system or installation.

1.5 Demarcation of Responsibilities between Compass Group and Others

1.5.1 General

Where there is a Demarcation of Responsibilities between Compass Group and others, the Duty Authorised Person is, on all matters relevant to his duties, to liaise with the other party (or parties) as necessary to avoid danger.

Each Demarcation of Responsibilities is to be recorded in writing and precisely described on a diagram. The point of demarcation must be at a cable termination and is to be at the out going terminals of a switch or circuit breaker.

Each proposed Demarcation of Responsibility is to be approved by the Authorising Engineer before it is finally agreed with the other party (or parties) involved.

A copy of the diagram is to be prominently displayed at each Sub–Station under joint control.

One copy of the agreement, including the diagram is to be held by the Authorising Engineer and another is to be placed in the Operational File (HV).
Where another organisation transfers control of electrical danger to Compass Group for the duration of a contract, the Authorising Engineer is to request from the other

organisation, details in writing of any known hazards (including potentially explosive atmospheres, polychlorobyphenyls (PCBs), etc) that are , or may be present. A copy of these details is to be placed in the Operational File (HV).

Note The other organisation has a duty to provide such details under Section 4 of the Health and Safety at Work Act 1974.

1.5.2 Where Compass Group has control of the danger for part of another organisation's system or installation

The Authorising Engineer is to liaise with the other organisation's Duty Holder to agree the point of demarcation and the points of contact for both parties. Once approved a formal agreement is to be drawn up and signed by both parties.

1.5.3 Where Compass Group does not have control of the danger for a system or installation

Compass Group staff or Compass Group contractors staff who are to undertake work or tests on parts of systems or installations for which Compass Group does not have control of the electrical danger are not required to comply with these Rules**,** but are to comply with the Statutory Regulations and/or any Safety Rules and Procedures issued by the organisation having control of the danger.

If no such Safety Rules and Procedures exist the matter is to be passed to the Authorising Engineer for adjudication.

1.5.4 Where contractors are to undertake installation work on an existing system or installation for which Compass Group have control of the danger.

Before any installation work is undertaken by contractors on an existing system or installation for which Compass Group has control of the danger, The Senior Authorised Person is to liaise with the person in the contractors company responsible for that installation work to ensure that the work is undertaken in accordance with these Rules.

1.5.5 For New Work before the system or installation is accepted from the Contractor

During the construction period of the contract, the contractor(s) will have control of the electrical danger and is to comply with all Statutory Regulations. The contractor(s) is not required to comply with these Rules unless they are imposed as part of the contract.

Where it is known that Compass Group will eventually accept control of the danger the Authorising Engineer, in conjunction with the Duty Holder for the site involved shall appoint a Senior Authorised Person to take responsibility for the new systems

or installations when they are officially handed to Compass Group for day to day operation and maintenance.

The Senior Authorised Person shall liaise with the contractors Duty Holder in order to become familiar with the systems or installations for which they will eventually take control of the electrical danger.

Where the contractors Duty Holder is responsible for part of a system or installation, the exact extent of the contractor's responsibility is to be agreed in writing.

1.5.6 Where a Distribution Network Operator appoints a Compass Group Authorised Person to operate their equipment.

A Distribution Network Operator may appoint nominated Authorised Persons to operate their equipment under defined conditions and in accordance with defined procedures. In such cases, the Authorised Persons are to be nominated by the Authorising Engineer for the Distribution Network Operator. Each nominated Authorised Persons is to obtain from the Distribution Network Operators Authorising Engineer a written agreement defining the responsibilities to be accepted and the regulations and procedures to be followed.

Each nominated Authorised Person is to acknowledge, in writing, receipt of the agreement from the Distribution Network Operator, and acceptance of the responsibilities after consultation with the Authorising Engineer. Copies of the agreement and acknowledgement are to be held by the Authorising Engineer and placed in the Operational File (HV).

A copy of any relevant regulations of the Distribution Network Operator is to be available to each nominated Authorised Person.

Any action taken by a nominated Authorised Person on behalf of the Distribution Network Operator is to comply with the instructions of the Distribution Network Operator and is to be recorded in the Log Book (HV) and any documentation required by the Distribution Network Operator.

Authorised Persons appointed by the Distribution Network Operator are, where practicable, to provide advanced warning to the Authorising Engineer and the Distribution Network Operator before relinquishing such an appointment.

2 Roles and Duties of Personnel

2.1 Co-Ordinating Authorising Engineer

2.1.1 Roles and Duties of the Co-Ordinating Authorising Engineer

The Co-Ordinating Authorising Engineer is responsible for the provision and overall management of these Rules, and is to monitor and audit the application of these Rules.

The Co-Ordinating Authorising Engineer is to appoint (or re-appoint) sufficient Authorising Engineers to provide the necessary cover for all systems and installations for which Compass Group has responsibility.

The Co-Ordinating Authorising Engineer should be satisfied that each prospective Authorising Engineer meets the qualifications and requirements of these Rules issue a Letter of Appointment valid for a period not exceeding five years.

The Authorising Engineer is to define in writing the geographical area, for which each Authorising Engineer is to be responsible and maintain a register of all Authorising Engineers.

If necessary, the Co-Ordinating Authorising Engineer may suspend, at any time, the appointment of an Authorising Engineer by withdrawing their Letter of Appointment.

The Co-Ordinating Authorising Engineer is to report, to the Duty Holder, any deficiency in the number of suitably trained and experienced Authorising Engineers that significantly impairs Compass Group ability to provide a safe and effective service.

The Co-Ordinating Authorising Engineer shall audit the performance and record the operational experience of each Authorising Engineer at twelve monthly intervals.

The Co-Ordinating Authorising Engineer is responsible for notifying the Duty Holder and the Authorising Engineers of any known defect reports or Operational Restrictions issued by a Distribution Network Operator, Manufacturer or Supplier of electrical equipment.

The Co-Ordinating Authorising Engineer shall assign an Authorising Engineer to investigate all Dangerous Occurrences involving electrical equipment, systems and installations for which Compass Group is responsible.

Ensure that any amendments to these Rules are brought to the attention of, and understood by, all Authorising Engineers.

2.1.2 Qualifications and Appointment of the Co-Ordinating Authorising Engineer

To be eligible for appointment the Co-Ordinating Authorising Engineer shall be:-

A. An Engineer with a minimum of five years relevant experience and a sound technical engineering background, be educated to HNC level and have a

minimum of eight years relevant experience as a practising Authorising Engineer.

B. Have satisfactorily completed the both the MS1 or MS4 Authorising Engineer and AP15, or equivalent, High Voltage Senior Authorised/Authorised Persons training courses within the last three years.

E. Be able to demonstrate their suitability for the role by demonstrating a good understanding of HSE Legislation and these Safety Rules, prior to the appointment through a formal interview.

The Co-Ordinating Authorising Engineer is to be appointed in writing, by the Duty Holder.

A Co-Ordinating Authorising Engineer is to be appointed or re-appointed for a period not exceeding five years.

2.2 Authorising Engineer

2.2.1 Roles and Duties of the Authorising Engineer

Within the geographical area for which an Authorising Engineer has been appointed, the Authorising Engineer is responsible for advising on the implementation and administration of these Rules, and is to monitor and audit the application of these Rules.

The Authorising Engineer is to appoint (or re-appoint) sufficient Senior Authorised/Authorised Persons to provide the necessary cover for all systems and installations for which Compass Group has responsibility.

The Authorising Engineer should be satisfied that each prospective Senior Authorised/Authorised Person meets the qualifications and requirements of these Rules and is to endorse each Senior Authorised/Authorised Person a Certificate of Appointment valid for a period not exceeding three years.

The Authorising Engineer is to define in writing, using drawings and diagrams if considered appropriate, the exact extent of the systems and installations for which each Senior Authorised/Authorised Persons is to be responsible and maintain a register of all Senior Authorised/Authorised Persons.

If necessary, the Authorising Engineer may suspend, at any time, the appointment of a Senior Authorised/Authorised Person by withdrawing their Certificate of Appointment.

The Authorising Engineer is to report, to the Co-Ordinating Authorising Engineer and Site Management, any deficiency in the number of suitably trained and experienced Senior Authorised/Authorised Persons that significantly impairs Compass Group ability to provide a safe and effective service.

The Authorising Engineer shall audit the performance and record the operational experience of each Senior Authorised/Authorised Person at twelve monthly intervals.

At intervals not exceeding three years, the Authorising Engineer shall undertake comprehensive audits, in accordance with Section 7.4 of these Rules of all systems and installations and review each Senior Authorised/Authorised Persons operational experience.

Where applicable to equipment within the areas for which the Authorising Engineer is responsible they shall notify Compass Group of any known defect reports or Operational Restrictions issued by a Distribution Network Operator, Manufacturer or Supplier of electrical equipment.

The Authorising Engineer will ensure that a system is in place to circulate relevant information on Operating Restrictions and Dangerous Occurrences to all Senior Authorised/Authorised Persons.

Investigate all Dangerous Occurrences involving electrical equipment, systems and installations for which the Authorising Engineer is responsible.

Agree in writing any local deviations from these Rules that may be necessary for their application to a particular item of equipment or location.

Ensure that any amendments to these Rules are brought to the attention of, and understood by, all Senior Authorised/Authorised Persons.

2.2.2 Qualifications and Appointment of the Authorising Engineer

To be eligible for appointment, a prospective Authorising Engineer shall be:-

A. An Engineer with a minimum of five years relevant experience and a sound technical engineering background who is qualified to HNC level and have minimum of eight years relevant experience as a practising Senior Authorised Person (HV).

B. Have satisfactorily completed both the MS1 or MS4 Authorising Engineer and AP15, or equivalent, High Voltage Senior Authorised/Authorised Persons training courses within the last three years.

C. Have satisfactorily completed an approved Authorising Engineer training course or have the equivalent experience.

D. Be familiar with the different types of equipment, installations and systems in use within the area for which the appointment is sought.

E. Be able to demonstrate their competency and suitability for the role by demonstrating a good understanding of the tasks involved and knowledge of these Rules, prior to the appointment through a formal assessment.

F. Have adequate knowledge of and, within the last three years, have successfully completed an emergency first aid training course which includes CPR.

An Authorising Engineer is to be appointed in writing, by the Co-Ordinating Authorising Engineer. A model letter of appointment is shown in Appendix A1.1

An Authorising Engineer is to be appointed or re-appointed for defined systems and installations for a period not exceeding five years.

2.3 Authorised Persons

2.3.1 Roles and Duties of Authorised Persons

The Authorised Person is responsible for the practical implementation and operation of these Rules for the systems and installations for which Compass Group has control of the danger and for which the Authorised Person has been appointed.

More than one Authorised person can be appointed for a system or installation but, only one is to be on duty at any one time. Each transfer of responsibility between Authorised Persons is to be recorded in the log book. The name of the Duty Authorised Person is to be displayed in the HV System Control Centre.

The Duty Authorised Person's instructions and decisions on electrical matters are final and are to be complied with. In the case of a dispute, the Duty Authorised Person is to stop the work or test and refer the matter to the Authorising Engineer for adjudication.

The duties of the Authorised Person (HV) should be by agreement of the Authorising Engineer and should include:-

A. Ensure that all personnel operating or working on High Voltage Electrical Systems controlled by Compass Group observe and comply with the requirement of these Rules.

B. The control of electrical distribution systems including the operation of High Voltage and major Low Voltage switch gear.

C. Produce or Check and Countersign Safety Switching schedules for planned works.

D. Issue, cancel and withdraw as appropriate all Safety Documents for the systems, installations and equipment for which the Senior Authorised Persons has been appointed.

E. Ensure that all Protective Equipment, Test Equipment and Portable Earthing Equipment is recorded, periodically inspected, calibrated and maintained in accordance with the manufacturer's recommendations and is to be inspected to ensure it is in a satisfactory condition before use.

F. Inform the Senior Authorised Person, where appointed or the Authorising Engineer:-

i. Any defects found in electrical equipment.

ii. Any dangerous occurrence

iii. Any dangerous practices observed in the course of his duties.

G. Arrange for, supervise or undertake cable detection or location work within the geographical area of the Senior Authorised Person's appointment.

H. Appoint Competent Persons for defined work and maintain a register of Competent Persons appointments including dates of appointment, restrictions, details of training and training dates and the date the appointment is due to expire. This register should be kept in the Operational File (HV) with copies of all current Competent Persons certificates.

I. Ensure that all records for the system for which the Senior Authorised Person is appointed are completed and kept up to date.

2.3.2 Qualifications of Authorised Persons

Perspective Authorised Persons shall be assessed and endorsed by the Authorising Engineer. The appointment is to be for defined systems and installations and will be registered on a Certificate of Appointment signed by the Authorised Person and the Authorising Engineer

To be eligible for appointment as an Authorised Person the perspective Authorised Person shall:-

A. Have adequate experience to safely operate, and make safe to work on or test, the equipment, systems or installations for which the appointment is sought.

B. Have an adequate knowledge of these Rules, and those Regulations and Documents listed in Appendix A4 that are applicable to the systems and installations for which the appointment is sought

C. Be technically competent and qualified to safely operate, and make safe to work on or test, the equipment, systems or installations for which the appointment is sought.

D. Be familiar with the equipment, systems or installations for which the appointment is sought.

E. Have successfully passed the AP15, or equivalent, Senior Authorised Persons HV training course within the last three years.

F. Be able to demonstrate competency and suitability for the role, prior to their appointment, through a formal interview carried out by the Authorising Engineer.

G. Have adequate knowledge of and, within the last three years, have successfully completed an emergency first aid training course which includes CPR.

2.4 Senior Authorised Persons

2.4.1 Roles and Duties of Senior Authorised Persons

Where there is more than one Authorised Person appointed for a system or installation the Authorising Engineer may nominate one to be the Senior Authorised Person who will have overall responsibility for the control of records etc.

The Senior Authorised Person is responsible for the practical implementation and operation of these Rules for the systems and installations for which Compass Group has control of the danger and for which the Senior Authorised Person has been appointed.

The Duty Authorised Person's instructions and decisions on electrical matters are final and are to be complied with. In the case of a dispute, the Duty Authorised Person is to stop the work or test and refer the matter to the Authorising Engineer for adjudication.

The duties of the Senior Authorised Person should be by agreement with the Authorising Engineer, the duties should include the following:-

A. Ensure, so far as reasonably practicable, that all personnel within the establishment observe and comply with the requirement of these Rules.

B. The control of electrical distribution systems including the operation of High Voltage and Major Low Voltage Switch Gear.

C. Produce or check and Countersign Safety Switching schedules for planned works.

D. Issue, cancel and withdraw as appropriate all safety documents for the systems, installations and equipment for which the Senior Authorised Persons has been appointed.

E. Ensure that all Protective Equipment, Test Equipment and Portable Earthing Equipment is recorded, periodically inspected, calibrated and maintained in accordance with the manufacturer's recommendations and is to be inspected to ensure it is in a satisfactory condition before use.

F. Inform the Authorising Engineer:-

i. Any defects found in electrical equipment.

ii. Any dangerous occurrence

iii. Any dangerous practices observed in the course of his duties.

G. Arrange for, supervise or undertake cable detection or location work within the geographical area of the Senior Authorised Person's appointment.

H. Appoint Competent Persons for defined work and maintain a register of Competent Persons appointments including dates of appointment, restrictions, details of training and training dates and the date the appointment is due to expire. This register should be kept in the Operational File (HV) with copies of all current Competent Persons certificates.

I. Ensure that all records for the system for which the Senior Authorised Person is appointed are completed and kept up to date.

2.4.2 Qualifications of Senior Authorised Persons

Perspective Senior Authorised Persons shall be assessed and endorsed by the Authorising Engineer. The appointment is to be for defined systems and installations and will be registered on a Certificate of Appointment signed by the Senior Authorised Person and the Authorising Engineer.

To be eligible for appointment as a Senior Authorised Person the perspective Senior Authorised Person shall:-

A. Have adequate experience to safely operate, and make safe to work on or test, the equipment, systems or installations for which the appointment is sought.

B. Have an adequate knowledge of these Rules, and those Regulations and Documents listed in Appendix A4 that are applicable to the systems and installations for which the appointment is sort.

C. Be technically competent and qualified to safely operate, and make safe to work on or test, the equipment, systems or installations for which the appointment is sought.

D. Be familiar with the equipment, systems or installations for which the appointment is sort.

E. Have successfully passed the AP15, or equivalent, Senior Authorised Persons HV training course within the last three years.

F. Be able to demonstrate competency and suitability for the role, prior to their appointment, through a formal interview carried out by the Authorising Engineer.

G. Have adequate knowledge of and, within the last three years, have successfully completed an emergency first aid training course which includes CPR.

2.5 Appointment and Re-Appointment of Senior Authorised and Authorised Persons

2.5.1 General

Senior Authorised and Authorised Persons are to be appointed (or re-appointed) by the Site Manager with Responsibility for Engineering and endorsed (or re-endorsed) by the Authorising Engineer for defined systems and installations, for periods not exceeding three years. Appointment and re-appointment is to be by the issue, and acceptance, of a letter of appointment signed personally by the Authorising Engineer and the Senior Authorised and Authorised Person. Letters of appointment or re-appointment and acceptance of appointment should be in the form illustrated in Appendix A1.2 and A1.3

2.5.2 Review of Senior Authorised and Authorised Persons' Appointments

Each Senior Authorised or Authorised Persons' appointment is to be reviewed by the Authorising Engineer at intervals not exceeding three years and prior to re-appointment.

2.5.3 Refresher Training for Senior Authorised and Authorised Persons

All Senior Authorised and Authorised Persons are to attend an AP15, or equivalent, Senior Authorised Persons HV training course at intervals not exceeding three years.

All Senior Authorised and Authorised Persons are to attend an emergency first aid training course in accordance with Section 7.3 of these Rules at intervals not exceeding three years.

2.5.4 Suspension and Cancellation of appointment of Senior Authorised or Authorised Persons

The appointment of any Senior Authorised or Authorised Person may be suspended or cancelled by the Authorising Engineer, who should take the following actions:-

A. Arrange a meeting with the Authorised or Authorised Person to discuss the suspension or cancellation and any actions necessary.

B. Retrieve the original Certificate of Appointment.

C. Inform in writing the Senior Authorised or Authorised Person giving the reasons for the suspension or cancellation and detailing any further training or experience considered necessary before re-appointment and the expected duration of the suspension or cancellation.

D. In the case of cancellation, the Authorising Engineer is to destroy the original Certificate of Appointment and overwrite all other copies with the word 'Cancelled' followed by the date and his signature.

E. On suspension or cancellation of an appointment the combination, or lock to the Key Control Box is to be changed.

F. The Authorising Engineer should take the action necessary to ensure alternative cover is provided.

2.6 Competent Persons

2.6.1 Roles and Duties of Competent Persons

The duties of a Competent Person authorised by the issue of a Certificate of Appointment will be limited to those duties specified on the certificate. These certificated duties must not preclude the necessity for a Permit to Work or Sanction for Test.

A Competent Person authorised by the issue of a Permit to Work or Sanction for Test may only undertake or supervise the work or test specified until the task is complete and the Competent Person has signed the clearance and the Safety Document is cancelled by the Duty Authorised Person.

Unless it is unavoidable the Competent Person is not to leave the location of the work or test until the task is completed. If the Competent Person has to temporarily leave the location of work or test, the task is to be suspended and adequate safety precautions taken to prevent danger. The work or test is not to be resumed until the Competent Person has returned to the location of work or test.

2.6.2 Qualifications for appointment of Competent Persons

To be eligible for appointment, prospective Competent Persons shall:-

A. Be competent to undertake work on, and testing of, the types of equipment for which the appointment is sought.

B. Be familiar with the types of installation and equipment that they will be required to work on or test.

C. Possess the necessary technical knowledge, skill, training and experience relevant to the nature of the work or tests to be undertaken to prevent danger or injury.

D. Have adequate knowledge of the relevant parts of these Rules, any agreed local variations, and those Regulations listed in Appendix A4 which are applicable to the installations and equipment on which work or tests are to be undertaken.

2.6.3 Appointment and Re-Appointment of Competent Persons

Appointment of a Competent Person will be either by issue of a Certificate of Appointment in which case they are deemed competent to carry out specified work or tests on designated installations or equipment without the issue of a Limitation of Access or by the issue of a Safety Document, in which case they are deemed competent to carry out the task to be performed.

Prior to the issue of a Certificate of Appointment the prospective Competent Person is to attend a formal interval with the Senior Authorised Person appointed for the system or installation for which the appointment is sought. Certificates of appointment should be in the form illustrated in Appendix A1.4.

A copy of the certificate is to be placed in the Operational File (HV)

2.6.4 Contractors Competent Persons

The contractor is responsible for ensuring that the Contractor's Competent Persons employed on Compass Group work or for work on systems or installations for which Compass Group have control of the danger are of a standard equivalent to that described for Competent Persons in these Rules and is to provide the Senior Authorised or Duty Authorised Person with written proof.

If the Senior Authorised or Duty Authorised Person is of the opinion that a Competent Person is not carrying out work in accordance with these Rules, or is working in an unsafe manner, the Senior Authorised or Duty Authorised Person is to stop the work, have the equipment or installation made safe and the Competent Person removed from the work area.

2.7 Safety Persons

2.7.1 Role of Safety Persons

The Safety Person is a person, not directly involved in the work or test being performed, who has adequate knowledge, experience and ability to avoid danger, keep watch, prevent unauthorised interruption of the work or test and be able to apply first aid and summon help.

Have adequate knowledge of and, within the last three years, have successfully completed an emergency first aid training course that includes CPR.

The Duty Authorised Person is to ensure that the Safety Person understands their role and fully understands how to disconnect the equipment being worked on or tested from all sources of supply and how to switch off or disconnect from its source of supply any test equipment.

2.7.2 Requirement for a Safety Person

The Safety Person is to be in attendance when the Duty Authorised Person considers it necessary and in the following circumstances:-

A. Whilst equipment is being proved or confirmed dead.

B. Whilst equipment is being earthed, other than by switchgear.

C. Whilst a cable is being spiked.

D. Whilst a High Voltage Potential Indicator is in use.

E. Whilst Pressure Testing is being undertaken at High Voltage.

F. Whilst Voltage or Phasing Tests are being undertaken at High Voltage.

G Whilst Primary Injection Tests are being carried out.

H. Whilst a High Voltage enclosure is in place

3 General Precautions

3.1 General

3.1.1 General

These Rules do not apply where equipment has been Isolated, Discharged, Disconnected and Removed from the system or installation.

Equipment that is considered by any Authorised Persons, to be in a Dangerous Condition is to be disconnected elsewhere and action taken to prevent it from being re-connected to the supply of electricity. A report of the incident and the action taken are to be reported as soon as is reasonably practicable to the Senior Authorised Person or Authorising Engineer.

Where the Senior Authorised or an Authorised Person is undertaking a task requiring a Permit to Work or Sanction for Test, these are to be issued by the Duty Authorised Person and receipted by the Senior Authorised Person or Authorised Person carrying out the task. In this case the Senior Authorised Person or Authorised Person becomes the Competent Person.

When a Permit to Work or Sanction for Test is to be issued the Duty Authorised Person is required to have made safe and identified equipment upon which the work or test is to be undertaken and all points of isolation and earthing.

The Duty Authorised Person is to positively identify the item(s) equipment to be worked on to the Competent Person and apply “Point of Work Sign(s)” to the equipment.

Where a Sanction for Test being issued the Duty Authorised Person will identify any points of earthing that may be removed for the duration of the test.

3.2 Underground Cables

3.2.1 Location of Underground Cables

Where it is proposed to carry out excavation work on sites for which Compass Group have control of the danger, it is the responsibility of the Duty Authorised Person to ensure that all underground power cables within the proposed areas of excavation are located and their positions marked prior to the ground being disturbed.

No persons should use cable location and tracing devices unless they are competent to do so and have been specifically trained in its use. A certificate should be issued by the instructor on successful completion of the training. A copy of this should be placed in the Operational File (HV).

Training in the use of cable location and tracing devices should normally be given by the manufacturers of the equipment, but alternatively it may be given by a Competent Person who has been trained and certified by the manufacturers or an approved training provider.

3.2.2 Identification and Spiking of Cables

Before the conductors of a cable are cut or exposed, the point(s) of isolation and earthing of the cable and the point of work on the cable are to be identified with certainty.

The identification may be regarded as clear and certain if the cable can be seen throughout its length, or if it can be clearly seen between a point of isolation and the point of work.

In the absence of clear and certain identification of a cable, it is to be spiked at the point of work. Prior to spiking a cable actions must be taken as far as reasonably practicable to ensure the cable is not energised, this may include some or all of the following:-

A. Interrogation of cable route plans.

B. Checking size and type of cable against drawings.

C. Use of a current sensing device.

D. Cable core signal injection.

Before spiking it may be necessary to carry out dead phasing tests to the cable that can be repeated after the works and results compared.

The spiking of cables may only be carried out by the Duty Authorised Person who has been specifically trained in the operation of the equipment to be used.

3.3 Display of Temporary Safety Signs

3.3.1 Caution Signs

Caution Signs are to be prominently displayed and securely fixed at all points of isolation before the start of and for the duration of any work or testing, and before the issue of any Permit to Work or Sanction for Test.

3.3.2 Danger Signs

Danger Signs are to be prominently displayed on any equipment which remains live and is adjacent to equipment to be worked on or tested, or where the positioning of such live equipment may cause confusion, before the start of and for the duration of any work or testing, and before the issue of any Permit to Work or Sanction for Test.

Where work or testing is to be undertaken on any part of a multi-cubicle switchboard, Danger Signs shall be prominently displayed on the cubicles or compartments adjacent to the part being worked on or tested. If the board has rear access Danger Signs shall similarly be displayed at both the front and rear of the board. Reliance is not to be placed upon the switchboard labelling when identifying parts at the rear of the board. Any discrepancies are to be reported.

Danger Signs are to prominently displayed so that they are visible at all angles of approach to a High Voltage Enclosure.

Temporary Safety Signs are to be suspended from non-conducting cords.

3.3.3 Point of Work Signs

Point of Work Signs are to be prominently displayed at the Point(s) of Work before the start of any work, and before the issue of any Permit to Work.

3.4 Withdrawable Equipment

3.4.1 General

When withdrawable electrical equipment has been disconnected from all sources of supply and withdrawn from its normal live position, its conductors shall be discharged to **earth** but need not remain connected to **earth**. All shutter mechanisms within the enclosure shall be locked shut when unattended; the keys controlling such locks shall at all time be under the control of the Duty Authorised Person.

3.5 Admittance to Sub-Stations

3.5.1 General

Any entrance to a room or enclosure that contains High Voltage Equipment is to be kept closed and securely locked when the equipment is unattended.

Where it is necessary to prevent danger or, where appropriate, injury, or prevent unauthorised operation, Equipment cubicles and operating mechanisms are to be locked when the Equipment is unattended.

No person other than the Duty Authorised Person shall enter a room containing High Voltage Equipment unless they are accompanied by The Duty Authorised Person or are in receipt of a valid Permit to Work, Sanction for Test, Limitation of Access, Specific Written Instruction, Standing Instruction or Competent Persons Certificate of Appointment.

3.5.2 Personal Protective Equipment (PPE)

Each Sub-Station is to be Risk Assessed and the PPE requirements for Sub-Station Entry are to be stipulated. When determining the PPE Requirements the Risk Assessment is to consider the following:

A. The Location and layout of the Sub-Station

B. The Type and Condition of the HV Switchgear (Including its susceptibility to Arc Flash / Blast).

C. Presence of other equipment, such as Generator Sets and Fire Suppression

4 Working on and Testing High Voltage Equipment

4.1 General

4.1.1 General

These Rules do not apply where equipment has been Isolated, Discharged, Disconnected and Removed from the system of installation.

High Voltage Equipment which is considered by a Senior Authorised or Authorised Person to be in a Dangerous Condition, or is subject to a Health and Safety Warning Notice that requires it to be immediately switched off should be isolated elsewhere and action taken by the Senior Authorised or Authorised Person to prevent it being re-connected to the supply of electricity. The Senior Authorised or Authorised Person is to report the matter as soon as is reasonably practicable to the Authorising Engineer.

All working on or testing of High Voltage Equipment connected to a system is to follow the procedures set out in Tables HV1 or HV2 of these Rules and Procedures as appropriate.

All working on or testing of High Voltage Equipment connected to a system is to be authorised by a Permit to Work or a Sanction to Test (Electrical) respectively.

Safety Locks are to be applied at points of isolation and earthing to prevent unauthorised operation or re-connection.

Temporary Safety Signs shall be fixed and displayed in accordance with section 3.3 of these Rules.

Where required by section 2.7 of these Rules, an Accompanying Safety Person is to be appointed before work or tests are commenced.

A High Voltage Potential Indicator is to be tested immediately before and after use against a High Voltage Test Supply. Only the Duty Authorised Person, or a Skilled Person acting on the instructions of and personally supervised by the Duty Authorised Person are to use a High Voltage potential indicator to prove dead in accordance with these Rules and Procedures.

Where practicable, High Voltage Cables and Equipment are to be proved dead prior to earthing. Where it is not practicable to prove dead any earth connection shall be made by means of a switch or circuit breaker. Other forms of earth connection shall not be used until the Equipment and its conductors have been proved dead.

In cases when working or testing is to be undertaken on High Voltage Equipment where it is not practicable to prove the Equipment dead prior to issuing a Permit to Work or Sanction to Test, the Duty Authorised Person having issued the Permit or Sanction is to remain with and supervise the Competent Person until conductors have been made accessible to a High Voltage Potential Indicator (or Low Voltage Potential Indicator for proving dead at the Low Voltage conductors of a High Voltage transformer). The Duty Authorised Person is then to confirm the Equipment dead before allowing the Competent Person to assume control of the work or tests.

Where the procedures involve the application of Additional Earths the unauthorised removal of such earth connections is to be prevented wherever practicable by the application of Safety Locks. The keys controlling such locks shall at all times be under the control of the Duty Authorised Person.

Where the procedures involve the application of Removable Additional Earths the unauthorised removal of such earth connections is to be prevented wherever practicable by the application of working locks. The keys controlling such locks shall at all times be under the control of the Competent Person.

Prior to the issue of a Permit to Work or Sanction to Test, the Duty Authorised Person is to show the prospective Competent Person the electrical diagram on the Permit to Work, the safety arrangements at the points of isolation, points of earthing and at the points of work or test and is to ensure that the person understands all the relevant safety procedures and precautions. If the prospective Competent Person thereafter accepts the Permit or Sanction they are responsible for the defined Work or Test until the Permit or Sanction is cancelled.

Where the Senior Authorised or an Authorised Person is undertaking a task requiring a Permit to Work or Sanction for Test, these are to be issued by the Duty Authorised Person and receipted by the Senior Authorised Person or Authorised Person carrying out the task. In this case the Senior Authorised Person or Authorised Person becomes the Competent Person.

4.2 Operation of High Voltage Switchgear

4.2.1 General

In an emergency High Voltage switchgear in service may be switched off or tripped off by any Authorised Person or Competent Person. The person is then without unnecessary delay and with some urgency, to advise the Duty Authorised Person (HV) of the action taken.

In normal circumstances High Voltage switchgear is to be operated only by:-.

A. The Duty Authorised Person.

B. A Competent Person who has been issued with a Standing Instruction giving authority for the operation.

C. A Competent Person who has been issued with a Specific Written Instruction giving authority for the operation.

D. A Person acting on the instructions and personally supervised by the Duty Authorised Person.

E. The Competent Person in receipt of a Sanction for Test, when the operation is part of the test procedure.

F. A Person acting on the instructions of and personally supervised by the Competent Person in receipt of a Sanction for Test, when the operation is part of the test procedure.

4.2.2 Standing and Specific Written Instructions

An Authorised Person may issue a Standing Instruction to a named Competent Person for a defined switching operation or sequence of operations in respect of specific items of High Voltage Equipment. If the Competent Person thereafter accepts the Standing Instruction that person becomes responsible for carrying out the defined tasks as required until the Standing Instruction is cancelled.

The Duty Authorised Person may give a Specific Written Instruction to a named Competent Person or to an Authorised Person for defined switching operations in respect of specific items of High Voltage switchgear. If the Competent Person or an Authorised Person thereafter accepts the Specific Written Instruction that person becomes responsible for the defined switching operations.

4.3 Testing at High Voltage

4.3.1 General

Where High Voltage tests are to be undertaken on High Voltage Equipment a Sanction for Test is to be issued to the prospective Competent Person who, on acceptance, becomes the Competent Person and is to be present throughout the duration of the tests.

The areas containing exposed live High Voltage conductors, Test Equipment and any High Voltage connection are to be regarded as High Voltage Enclosures.

Unauthorised access to such areas is to be prevented by, as a minimum, White and Red striped tape, not less than 25mm wide, suspended on posts, and by the display of Danger Signs in accordance with section 4.4 of these Rules. And, the attendance of a Safety Person(s) in accordance with sections 2.7 and 4.4 of these Rules.

4.3.2 Live Voltage and Phasing Tests

Live voltage and phasing tests on High Voltage Equipment may be undertaken provided adequate precautions are taken to prevent accidental contact with, and prevent injury from, live High Voltage conductors. Test Equipment for live voltage and phasing tests is to be tested immediately before and after use against a Test Supply. Live voltage and phasing tests on High Voltage Equipment are to be undertaken only by the Duty Authorised Person, with assistance if necessary from Skilled Person acting on verbal instructions from the Duty Authorised Person, with a Safety Person in attendance. Neither a Permit to Work nor a Sanction for Test is appropriate to this activity.

4.4 High Voltage Enclosures

4.4.1 General

No person other than the Duty Authorised Person using a High Voltage Potential Indicator designed for the purpose shall be engaged in any work or activity on or near any live conductor (other than one covered with insulating material so as to prevent danger) where danger may arise.

The areas containing exposed live High Voltage conductors, Test Equipment and any High Voltage connection are to be regarded as High Voltage Enclosures.

Except in a High Voltage Enclosure, access to live High Voltage conductors is to be possible only by the use of a tool or key.

A High Voltage Enclosure is to be opened only by the Duty Authorised Person or Skilled Person acting on the instructions of and personally supervised by the Duty Authorised Person.

Unauthorised access to such areas is to be prevented by, as a minimum, White and Red striped tape, not less than 25mm wide, suspended on posts, and by the display of Danger Signs so that they are visible at all angles of approach to a High Voltage Enclosure. And, the attendance of a Safety Person or Persons as deemed necessary by The Duty Authorised Person and in accordance with sections 2.7 of these Rules.

4.4.2 Entry into a High Voltage Enclosure

A High Voltage Enclosure is to be entered only by:-

A. The Duty Authorised Person.

B. A Skilled Person acting on the instructions of and personally supervised by the Duty Authorised Person.

C. The Competent Person in receipt of a Sanction to Test, when the High Voltage Enclosure is created as part of the test procedure.

D. A Skilled Person acting on the instructions of and personally supervised by the Competent Person in receipt of a Sanction to Test, when the High Voltage Enclosure is created as part of the test procedure.

E. A Safety Person in connection with his or her safety role.

4.5 Procedures

Table HV1. Procedures to be carried out by the Duty Authorised Person to enable work on High Voltage Equipment.

STEPS IN COLUMN 1 ARE TO BE UNDERTAKEN IN NUMERICAL ORDER The Duty Authorised Person is responsible for all tasks	
COLUMN 1	**COLUMN 2**
STEP 1 **Prepare a Switching Schedule**	• Review the Task Risk Assessment and Method Statement. • Ensure that no other Safety Documents are open for the equipment involved • Prepare a switching schedule in duplicate and obtain a countersignature from another Authorised Person for the same system or Authorising Engineer. • Sign on as Duty Authorised Person, Display as such in the HV Control Centre and check Mimic Diagram before proceeding to Step 2.
STEP 2 **Isolate and Fix Signs**	• Disconnect from all sources of supply. • Prevent unauthorised re- connection by fixing Safety Locks and Caution Signs at points of isolation. • Fix Danger Signs to live equipment adjacent to the Point of Work. • Affix Point of Work Sign(s) to the Point(s) of Work
STEP 3 **Prove Dead**	• Where practicable, Prove Dead with a High Voltage Potential Indicator at all accessible points of isolation and where appropriate Prove Dead on the Low Voltage side of a transformer, i.e. LV Feeder Pillars, LV Switchboards etc. *Where it is not practicable to prove the Equipment dead prior to issuing a Permit to Work, the Authorised Person having issued the Permit is to remain with and supervise the Competent Person until the conductors have been made accessible to a High Voltage Potential Indicator and Confirmed Dead.*
STEP 4 **Earth**	• Earth HV conductors at all points of isolation and or Point of Work and prevent unauthorised disconnection by fixing Safety Locks. • Identify with certainty or spike cables at the point or points of work if the conductors are to be exposed. • Earth overhead lines near the Point of Work.
STEP 5 **Secure Safety Lock Keys**	• Secure the Keys for the Safety Locks in the Safety key Box
STEP 6 **Issue The Permit to Work**	• Show the prospective Competent Person the electrical diagram on the Permit to Work, the safety arrangements at the points of isolation and at the Point(s) of Work and ensure that the person understands all the relevant safety procedures and precautions. • Issue The Permit to Work and The Competent Persons Key for the Safety key Box to the Competent Person.
STEP 7 **Undertake the Work**	• The Competent Person is to undertake or directly supervise the work and on completion, or when the work is stopped and made safe, is to return the original of the Permit to Work and The Competent Persons Key for the Safety key Box to the Duty Authorised Person to complete the Clearance and cancellation of the Permit to Work retained in the pad.

Table HV2. Procedures to be carried out by the Duty Authorised Person to enable testing of High Voltage Equipment.

STEPS IN COLUMN 1 ARE TO BE UNDERTAKEN IN NUMERICAL ORDER The Duty Authorised Person is responsible for all tasks	
COLUMN 1	**COLUMN 2**
STEP 1 **Prepare a Switching Schedule**	• Review the Task Risk Assessment and Method Statement • Ensure that no other Safety Documents are open for the equipment involved • Prepare a switching schedule in duplicate and obtain a countersignature from another Authorised Person. • Sign on as Duty Authorised Person, Display as such in the HV Control Centre and check Mimic Diagram before proceeding to Step 2.
STEP 2 **Isolate and Fix Signs**	• Disconnect from all sources of supply. • Prevent unauthorised re-connection by fixing Safety Locks and Caution Signs at points of isolation. • Affix Danger Signs to live equipment adjacent to the Point of Work. • Where a High Voltage Enclosure is required, Set Up Barriers and Affix Danger Signs at all approaches.
STEP 3 **Prove Dead**	• Where practicable, Prove Dead with a High Voltage Potential Indicator at all accessible points of isolation and where appropriate Prove Dead on the Low Voltage side of a transformer, i.e. LV Feeder Pillars, LV Switchboards etc. *Where it is not practicable to prove the Equipment dead prior to issuing a Sanction to Test, the Authorised Person having issued the Sanction is to remain with and supervise the Competent Person until the conductors have been made accessible to a High Voltage Potential Indicator and Confirmed Dead.*
STEP 4 **Earth**	• Earth HV conductors at all points of isolation and or Point of Test • Fix Working Locks to Earths if their removal is required during the test. If the Earth is not to be removed prevent unauthorised disconnection by fixing Safety Locks.
STEP 5 **Secure Safety Lock Keys**	• Secure the Keys for the Safety Locks in the Safety key Box
STEP 6 **Issue The Sanction for Test**	• Show the prospective Competent Person the electrical diagram, the safety arrangements at the points of isolation and at the Point of Test and ensure that the person understands all the relevant safety procedures and precautions. • Issue The Sanction for Test and The Competent Persons Key for the Safety key Box to the Competent Person. The Duty Authorised Person retains the Working Lock Keys and is to remove and replace earths as requested.
STEP 7 **Undertake the Test**	• The Competent Person is to undertake or directly supervise the Test and on completion, or when the Test is stopped and made safe, the conductors are to be discharged and any earths restored. • The Competent Person returns the original of the sanction for Test and The Competent Persons Key for the Safety key Box to the Duty Authorised Person to complete the Clearance and cancellation of the sanction for Test retained in the pad.

5 Documentation

5.1 Switching Schedules

5.1.1 General

Prior to the issue of a Permit to Work or Sanction for Test, a Switching Schedule, detailing the intended sequence of safety operations to be performed to make the equipment safe for the execution of the work or test, is to be prepared. When the Switching Schedule has been completed it should be countersigned by another Authorised Person who has a detailed working knowledge of the particular system involved.

A Switching Schedule form shall have a format in accordance with Appendix A2.1. It shall have an original and a duplicate of each page, and each sheet of a Switching Schedule shall be assigned the same unique and non-repeatable serial number.

5.1.2 Contents of Switching Schedules

The Switching Schedule is to be completed in duplicate by the Authorised Person who is to be responsible for issuing the Permit to Work or Sanction to Test, and is to indicate:-

A. The name of the originating Authorised Person

B. The name and signature of the countersigning Authorised Person

C. Date of the countersignature.

D. Site Name

E. The Equipment for which the proposed sequence of operations are intended to make safe to work on or test.

F. The purpose of the proposed work or test.

G. The sequence of operations to be undertaken up to and including the issue of The Permit to Work, Sanction for Test, or Confirming Dead as appropriate. including:-

i. The location, including any name of identification code, at which each operation is to be performed.

ii. The type of each item or switchgear to be operated.

ii. The identity of each item of switchgear to be operated (this should be what is stated on the local label on the equipment or alternatively the generic type, manufactures name and type reference).

iii. The operation or action to be performed.

iv. The reason for the operation or action.

5.1.3 Implementing Switching Schedules

Before commencing the sequence of operations detailed on the countersigned Switching Schedule, the Duty Authorised Person is to confirm that persons affected have been informed and that permission from the client has been obtained.

Before commencing the sequence of operations detailed on the countersigned Switching Schedule, the duplicate is retained in the Switching Schedule Pad and located in the Document Cabinet.

The Duty Authorised Person is to refer to the original of the Switching Schedule while carrying out the sequence of operations detailed on the Switching Schedule, and is to note on it the date and time of each operation.

The serial number of the Permit to Work or Sanction for Test should be entered on the Switching Schedule as a cross reference.

5.1.4 Completion of Switching Schedules

On completion the original of the Switching Schedule should be placed in the Operational File (HV).

The original Switching Schedules are to be retained, in the Operational File (HV), for three years after the dates on which they were implemented.

5.2 Permit to Work

5.2.1 General

A Permit to Work shall be issued by The Duty Authorised Person to a Competent Person before any work on defined items of equipment is started. Items of equipment or tasks that will require the issue of a Permit to Work include:-

A. Work on transformers having one or more High Voltage Windings

B. Work on High Voltage cables including cable end boxes.

C. Work within a High Voltage Enclosure.

D. Work on High Voltage Switchgear (except for withdrawable equipment which has been Isolated, Discharged, Disconnected and Removed from the system or installation.

F. Work on High Voltage Overhead Lines.

G. Any other work which the Duty Authorised Person deems a Permit to work necessary.

A Permit to Work shall have the format of that shown in Appendix A2.2. It shall have an original and a duplicate page. Each page of the permit shall bear the same serial number. Pads of numbered forms shall be used in sequence.

Prior to issue, an Isolation and Earthing Diagram shall be completed on the Permit to Work and explained to the Competent Person.

Only one Permit to Work pad shall be in use at any one time for each system. When not in use the Permit to Work pads shall be stored in the lockable Document Cabinet.

A Permit to Work is not to be issued for an item of equipment for which a existing Permit to Work or Sanction for Test, remains valid, nor for any equipment which is within an area for which a Limitation of Access exists unless a Risk Assessment indicated that it is safe to do so.

Where an Authorised Person is to undertake the work he will become the Competent Person upon Receipt of the Permit to Work from the Duty Authorised Person.

5.2.2 Issue and Acceptance of a Permit to Work

A Permit to Work is to be issued at the point of work, and the points of isolation and earthing shown to the Competent Person. The issue and cancellation of every Permit is to be recorded in the High Voltage Log.

Before issuing a Permit to Work, the Duty Authorised Person is to:-

A. Positively identify to the prospective Competent Person the Equipment upon which the work is to be undertaken, indicating the precise Point(s) of Work and Point of Work Sign(s).

B. Explain in detail to the prospective Competent Person the exact extent of the work to be undertaken.

C. Draw the attention of the prospective Competent Person to any special instructions and safety measures noted on the Permit.

D. Show the prospective Competent Person the electrical diagram on the Permit to Work, and the safety arrangements at the points of isolation, earthing and the point(s) of work.

E. Obtain a signature from the Competent Person to confirm that the Point of Work has been positively identified and Point of Work Sign(s) posted.

F. Demonstrate to the satisfaction of the prospective Competent Person that the Equipment is dead, earthed and safe to work on.

G. Where it is not practicable to prove the Equipment dead prior to issuing a Permit to Work, the Authorised Person having issued the

Permit is to remain with and supervise the Competent Person until conductors have been made accessible to a High Voltage Potential Indicator (or Low Voltage Potential Indicator for confirming dead at the Low Voltage conductors of a High Voltage Transformer) before allowing the Competent Person to assume control of the work.

The Duty Authorised Person shall sign and print their name, along with the date and time, the Issue section of the Permit to Work.

Prior to acceptance of the Permit to Work, the Competent Person, having understood the work to be undertaken and being prepared to carry it out, taking into account any special instructions, shall sign and print their name, along with the date and time, the Receipt section of the Permit to Work.

The original copy of the Permit is issued to the Competent Person along with the Competent Person's Key to the safety key Box.

After accepting the Permit to Work the prospective Competent Person becomes the Competent Person and is responsible for personally supervising or undertaking the defined work. The Competent Person is not to leave the place where the work is being carried out, or to undertake any other work or tests while the defined work is in progress. During any temporary absence of the Competent Person from the place where the work is being carried out, the work is to be suspended and adequate safety precautions taken until work is resumed on the return of the Competent Person.

5.2.3 Completion of the work and a Cancellation of the Permit to Work

Having completed the work, withdrawn all persons, instruments and tools from the location of work and having advised all persons associated with the work that it is no longer safe to work on the Equipment, the Competent Person is to return the original of the Permit to the Permit to Work Pad and complete and sign The Clearance section of the Permit to Work.

Where work is stopped the aforementioned procedures apply and in addition the Competent Person confirms that the Equipment has been made safe pending the issue of another Permit or a Sanction.

The Duty Authorised Person completes and signs the Cancellation section of the Permit to Work and places the original in the Operational File with the relevant Switching Schedule and any other associated paperwork.

If the Competent Person has lost the original of the Permit to Work, the loss is to be recorded by the Duty Authorised Person on the duplicate copy, and in the High Voltage Log. The Competent Person is to countersign the loss of the original Permit. and a note to that effect placed in the Operational File (HV) in place of the original. The loss is to be reported to the Authorising Engineer.

Completely filled pads are to be retained in the lockable Document Cabinet for three years after the date of cancellation of the last Permit issued from the pad.

5.3 Sanction for Test

5.3.1 General

A Sanction to Test is to be issued by the Duty Authorised Person to a prospective Competent Person before the commencement of any testing of Equipment at High Voltage.

A Sanction to Test form shall have a format in accordance with Appendix A2.3. It shall have an original page and a duplicate page. Each page of a Sanction shall bear the same pre-printed serial number and sets of numbered forms shall be used in sequence.

Only one Sanction for Test pad shall be in use at any one time for each system. When not in use the Sanction for Test pads shall be stored in the lockable Document Cabinet.

A Sanction for Test is not to be issued for an item of equipment for which a existing Permit to Work or Sanction for Test, remains valid, nor for any equipment which is within an area for which a Limitation of Access exists.

5.3.2 Issue and Acceptance of a Sanction for Test

A Sanction for Test is to be issued at the point of test, and the points of isolation and earthing shown to the Competent Person. The issue and cancellation of every Sanction is to be recorded in the High Voltage Log.

Where an Authorised Person is to undertake the test he will become the Competent Person upon Receipt of the Sanction for Test from the Duty Authorised Person.

Before issuing a Sanction for Test, the Duty Authorised Person is to:-

A. Positively identify to the prospective Competent Person the Equipment upon which the test is to be undertaken, indicating the precise Point(s) of Test.

B. Explain in detail to the prospective Competent Person the exact extent of the test to be undertaken.

C. Draw the attention of the prospective Competent Person to any special instructions and safety measures noted on the Sanction.

D. Show the prospective Competent Person the electrical diagram and the safety arrangements at the points of isolation, earthing and the places of test.

E. Obtain a signature from the Competent Person to confirm that the Point of Test has been positively identified.

F. Demonstrate to the satisfaction of the prospective Competent Person that the Equipment is dead and safe to test.

G. Where it is not practicable to prove the Equipment dead prior to issuing a Sanction for Test, the Authorised Person having issued the Sanction is to remain with and supervise the Competent Person until conductors have been made accessible to a High Voltage Potential Indicator (or voltage test indicator for confirming dead at the low voltage conductors of a High Voltage Transformer) before allowing the Competent Person to assume control of the test.

H. If Circuit Main Earths are to be removed and replaced this will be carried out by the Duty Authorised Person at request of the Competent Person.

The Duty Authorised Person shall sign and print their name, along with the date and time, the Issue section of the Sanction for Test.

Prior to acceptance of the Sanction for Test, the Competent Person, having understood the test to be undertaken and being prepared to carry it out, taking into account any special instructions, shall sign and print their name ,along with the date and time, the Receipt section of the Sanction for Test.

The original copy of the Sanction is issued to the Competent Person along with the Competent Person's Key to the Safety Key Box.

After accepting the Sanction for Test the prospective Competent Person becomes the Competent Person and is responsible for personally supervising or undertaking the defined test. The Competent Person is not to leave the place where the test is being carried out, or to undertake any other work or tests while the defined test is in progress. During any temporary absence of the Competent Person from the place where the test is being carried out, the test is to be suspended and adequate safety precautions taken until test is resumed on the return of the Competent Person.

5.3.3 Completion of the test and Cancellation of the Sanction for Test

Having completed the test, withdrawn all persons, instruments and tools from the location of the test and having advised all persons associated with the test that it is no longer safe to work on or test the Equipment, the Competent Person is to return the original of the Sanction to the Sanction for Test Pad and complete and sign The Clearance section of the Sanction for Test.

Where the test is stopped the aforementioned procedures apply and in addition the Competent Person confirms that the Equipment has been made safe pending the issue of another Sanction or a Permit.

The Duty Authorised Person completes and signs the Cancellation section of the Sanction for Test and places the original in the Operational File with the relevant Switching Schedule and any other associated paperwork.

If the Competent Person has lost the original of the Sanction for Test, the loss is to be recorded by the Authorised Person on the duplicate copy, and in the High Voltage Log. The Competent Person is to countersign the loss of the original

Sanction and a note to that effect placed in the Operational File (HV) in place of the original. The loss is to be reported to the Authorising Engineer.

Completely filled pads are to be retained in the lockable Document Cabinet for three years after the date of cancellation of the last Sanction issued from the pad.

5.4 Limitation of Access

5.4.1 General

The Duty Authorised Person may issue a Limitation of Access for any specified task, other than one that requires a Permit to work or Sanction for Test, within an area or location that is normally under the control of the Senior Authorised / Authorised Persons.

A Limitation of Access shall have the format shown in Appendix A2.4. It shall have an original and a duplicate. Each page of a Limitation of Access shall bear the same serial number. Pads of numbered forms shall be used in sequence.

Only one Limitation of Access pad shall be in use at any one time for each geographical area for which the Authorised Person has responsibility. When not in use the Limitation of Access pads shall be stored in the lockable Document Cabinet.

Provided that a Risk Assessment indicates that it is safe, a Limitation of Access may be issued for work to be undertaken in an area or location containing an item of equipment where a Permit to Work is valid.

A Limitation of Access is not to be issued for any area for which a Sanction for Test is valid, or where a High Voltage Enclosure has been set up.

Where practicable, all items of live Equipment at the location are to be cordoned from the working area covered by a Limitation of Access for the duration of the work activities. This is to be achieved by placing temporary barriers, comprising as a minimum no entry warning tape or equivalent prominent markers, to define the non-accessible area. No entry warning tape may be attached to suitably located temporary posts and to conveniently located fixed items or structure.

Danger Signs are to be prominently displayed on all items of live Equipment at and adjacent to the location to which the Limitation of Access applies and whilst it remains valid.

Whilst the Limitation of Access is in force, the Authorised Person is to inspect the area at the end of each working period or day to ensure that:-

A. Any flammable or hazardous materials introduced into the area during the work activities are removed when the activities cease at the end of each working period or day.

B. Emergency Escape Routes, Emergency Exits and access to essential Electrical Equipment has not been obstructed.

5.4.2 Issue and Acceptance of a Limitation of Access

A Limitation of Access may be offered to a person of any discipline who is competent to personally execute the work activities or to supervise the execution of the work activities by others. On accepting the Limitation of Access, the person becomes the Responsible Person and is personally responsible for undertaking or supervising the work activities, for which the access is required.

Limitation of Access are to be issued at the place where the work activities are to be undertaken. The issue and cancellation of every Limitation of Access is to be recorded in the High Voltage Log Book.

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Before issuing a Limitation of Access, the Duty Authorised Person shall positively identify the scope and limits of the work activities which are to be carried out, and the physical extent of the work activities at the location.

Prior to offering a Limitation of Access to the prospective Competent Person, the Duty Authorised Person is to:-

A. Accompany the prospective Competent Person to the location where the work is to be undertaken.

B. Confirm with the prospective Competent Person in detail the exact extent of the work activities to be undertaken, including its scope and limits.

C. Show the prospective Competent Person the area in which the work activities are to be undertaken.

D. Draw the attention of the prospective Competent Person to any special instructions and safety measures.

E. Indicate to the prospective Competent Person all items of live Electrical Equipment in or adjacent to the work activities area, which are to be identified by Danger Signs.

The Duty Authorised Person shall sign and print their name, along with the date and time, the Issue section of the Limitation of Access.

Prior to acceptance of the Limitation of Access, the prospective Competent Person, having understood the work to be undertaken and being prepared to carry it out, taking into account any special instructions, shall sign and print their name ,along with the date and time, the Receipt section of the Limitation of Access.

The original copy of the Limitation of Access is issued to the Competent Person.

After accepting the Limitation of Access the prospective Competent Person becomes the Competent Person and is responsible for personally supervising or undertaking the defined work. The Competent Person is not to leave the place where the work is being carried out, or to undertake any other work while the defined work is in progress. During any temporary absence of the Competent Person from the place where the work is being carried out, the work is to be suspended and adequate safety precautions taken until work is resumed on the return of the Competent Person.

5.4.3 Completion of the work and Cancellation of the Limitation of Access

Having completed the work, withdrawn all persons, instruments and tools from the working place the Competent Person is to return the original of the Limitation of Access to the Duty Authorised Person and complete and sign The Clearance / Withdrawal section of the Limitation of Access.

When the work is completed, The Duty Authorised Person is to check that the location has been left in a clean and tidy condition and is secured against unauthorised access.

The Duty Authorised Person completes and signs the Cancellation section of the Limitation of Access and places the original in the Operational File (HV) with any other associated paperwork.

If the Duty Authorised Person decides to stop the work, the Limitation of Access is to be withdrawn and cancelled. The withdrawal is to be noted on the Limitation of Access and the reasons for the withdrawal recorded in the High Voltage Log.

If the Competent Person has lost the original of the Limitation of Access, the loss is to be recorded by the Authorised Person on the duplicate copy, and in the High Voltage Log. The Competent Person is to countersign the loss of the original Limitation of Access and a note to that effect placed in the Operational File (HV) in place of the original. The loss is to be reported to the Authorising Engineer.

Completely filled pads are to be retained in the lockable Document Cabinet for three years after the date of cancellation of the last Limitation of Access issued from the pad.

5.5 Standing Instruction and Specific Written Instruction

5.5.1 Standing Instruction

An Authorised Person may originate a Standing Instruction for:-

A. Defined tasks, other than intrusive works on the High Voltage System, within an area under the control of the Authorised Person (HV). Including:

i. Sub-Station Lighting Repairs

ii. Meter Readings

iii. Sub-Station Cleaning.

iv. topping-up on battery installations, having a terminal voltage not exceeding 500V or that may be sectionalised in such away that this disconnection and separation is secure and each section of batteries has a terminal voltage not exceeding extra low voltage. The issuing of such a Standing Instruction is limited to areas where it has been decided that these activities may be undertaken without a Permit to Work.

B. Defined switching operations in respect of specific items of High Voltage Equipment and Low Voltage distribution Equipment.

A Standing Instruction shall have the format shown in Appendix A2.5. It shall have an original and a duplicate. Each page of a Standing Instruction shall bear the same serial number. Pads of numbered forms shall be used in sequence.

The original and the duplicate of the Standing Instruction are to be signed by all the Authorised Persons appointed for the system or installation to which the Instruction applies.

A Standing Instruction is not to be transferred from one Competent Person to another.

The Competent Person is to acknowledge receipt by completing and signing the original and the duplicate pages of the Standing Instruction; the signature renders the Instruction valid for the defined work or tests. The original of the Instruction is issued to the Competent Person

The issue of a Standing Instruction is to be recorded in the High voltage Log.

The duplicate of the signed Standing Instruction is to be retained in the pad which is to be kept in the locked Document Cabinet.

An Authorised Person may, at any time, cancel a Standing Instruction. The cancellation is to be notified to all other Authorised Persons appointed for the system or installation.

On termination, the original of the Standing Instruction is to be retrieved from the Competent Person by an Authorised Person, the original and duplicate of the Standing Instruction held in the pad are to be overwritten with the word, "CANCELLED" or "EXPIRED", as appropriate, followed by the date of termination.

The original is to be placed in the Operational File (HV).

The duplicate is to be countersigned by each of the Authorised Persons and retained in the pad.

The cancellation or expiry of a Standing Instruction is to be noted in the High Voltage Log

A Standing Instruction is to be renewed at intervals of no longer than one year and whenever a new Authorised Person is appointed.

Completely filled pads are to be retained in the lockable Document Cabinet for three years after the date of cancellation of the last Standing Instruction issued from the pad.

5.5.2 Specific Written Instruction

The Authorised Person may issue a Specific Written Instruction for a defined switching operation or a sequence of operations in respect of specific items of High and Low Voltage Equipment.

A Specific Written Instruction form shall have a format shown in Appendix A2.6. It shall have an original and a duplicate. Each page of a Specific Written Instruction shall bear the same serial number. Pads of numbered forms shall be used in sequence.

A Specific Written Instruction is to be offered only to a Competent Person who is in possession of a current Certificate of Appointment appropriate to the Equipment to be operated, or to an Authorised Person who has been appointed for the system or installation.

A Specific Written Instruction is not to be transferred from one Competent Person to another or from one Authorised Person to another.

The prospective Competent Person is to acknowledge receipt of the Specific Written Instruction by signing the original and duplicate; the signature renders the Instruction valid for the defined operations. The original of the Instruction is issued to the prospective Competent Person who thereafter becomes the Competent Person

The switching operations are to be undertaken immediately without any intentional delay following the issue of the Instruction.

The duplicate of the signed Specific Written Instruction is to be retained in the pad which is to be kept in the locked Document Cabinet.

The issue of a Specific Written Instruction is to be recorded in the High Voltage Log.

On completion of the switching operations the Competent Person is to return the original Instruction to the Duty Authorised Person immediately without any intentional delay.

Both copies are to be overwritten as “COMPLETE” or “WITHDRAWN” as applicable. The original is to be placed in the Operational File (HV) and the duplicate is to be retained in the pad.

Details of the switching operations carried out are to be entered in the High Voltage Log.

Completely filled pads are to be retained in the lockable Document Cabinet for three years after the date of cancellation of the last Specific Written Instruction issued from the pad.

5.6 High Voltage Log

5.6.1 General

A High Voltage Log is required for each geographical area for which the Senior Authorised / Authorised Persons have been appointed. The book is to be indelibly marked with the name of the Site, and the system or installation for which it refers and is to be kept in the locked Document Cabinet when not in use.

The Log Book shall have the format shown in Appendix A2.7.

5.6.2 Log Book Entries

Entries are to be made by the Duty Authorised Person in chronological order. Each entry is to be ruled off with a horizontal line across the page. Entries are to show:-

A. The acceptance and relinquishing of responsibility between Duty Authorised Persons.

B. The removal, return and transfer of the Authorised Persons Key from the Key Control Box

C. Each individual operation of High Voltage switchgear and of Major Low Voltage switchgear up to and including the Main LV intake switchgear.

D. Adjustment of the Mimic Diagram to indicate the present state of the system or installation.

E. The issue and return of any key for HV equipment, ie, switchgear, sub-stations, transformers etc.

F. The issue, cancellation, loss or withdrawal of a Permit to Work, Sanction for Test, Limitation of Access or Standing or Specific Written Instruction.

G. The receipt, termination and remedial action associated with an Operational Restriction.

H. The Spiking of a cable

I. The three monthly inspection of HV Switchrooms and Sub-Stations.

J. The annual inspection of protective equipment, test equipment and six monthly inspection of portable earthing equipment.

Completely filled Logs are to be retained in the lockable Document Cabinet for three years after the date of the last entry.

5.7 High Voltage Operational File

5.7.1 General

An Operational File (HV) is required for each geographical area for which the Senior Authorised / Authorised Persons have been appointed. A ring binder file is to be entitled "OPERATIONAL FILE (HV) and clearly and indelibly marked with the name of the Site, and the system or installation for which it refers and is to be kept in the locked Document Cabinet when not in use.

5.7.2 File Contents

The File is to contain in separate sections a copy of each of the following:-

A. Certificates of Appointment for the Senior Authorised Person, with copies of their latest AP Training and First aid Certificate.

B. Certificates of Appointment for all Authorised Persons, with copies of their latest AP Training and First aid Certificates.

C. A register of Competent Persons including details and dates of training, restrictions and the issue and review dates of Certificates of Appointment.

D. Certificates of Appointment for all Competent Persons including any appointed Contractors Competent Persons.

E. The originals of every approved Switching Schedule, Permit to Work Sanction for Test, Method Statement and Risk Assessment for each task undertaken, filed together as a job file.

F. Any Operational Restrictions received, signed by all Authorised Persons for the system or installation.

G. Operational Restriction cancelled

H. Any demarcation agreements.

I. Any agreements with the Distribution Network Operator.

J. Details of protective equipment, test equipment and portable earthing equipment within the establishment. Including specifications, operators or users instructions, maintenance instructions and where appropriate calibration records.

K A copy of these Rules.

Documents in the file are to be retained for a period of three years after their dates of cancellation or expiry.

6 Operating Procedures

6.1 Operational Restrictions

6.1.1 General

An Operational Restriction is specific information modifying the normal operating procedures associated with a particular type of equipment.

The Authorising Engineer shall ensure that each Operational Restriction that is received is passed as soon as reasonably practicable to each Senior Authorised Person for action.

Any Senior Authorised / Authorised Person receiving or discovering an Operational Restriction imposed by a Distribution Network Operator or equipment manufacturer shall inform the Authorising Engineer without delay.

On receipt of an Operational Restriction, the Senior Authorised Person is to:-

A. Notify the Authorising Engineer that the restriction has been received and advise whether or not the subject equipment forms part of the systems or installations for which the Senior Authorised Person is responsible.

B. Record the receipt in the High Voltage Log Book

C. Ensure that a copy of the restriction, signed by all Authorised Persons for the system or installation, is placed in Operational File (HV).

D. Where the equipment to which the Operational Restriction refers, forms part of the system or installation for which they are responsible, the Senior Authorised Person is to place a copy of the restriction in the Operating and Maintenance Manual.

E. Arrange any inspection and remedial work required.

F. Where the Mimic Diagram depicts the equipment referred to in the restriction, each item on the mimic is to be marked to indicate the existence of an Operational Restriction.

G. Where it considered necessary fix warning signs on each item of equipment involved.

H. Report the satisfactory completion of any remedial works to the Authorising Engineer and ensure that details of any remedial work undertaken are placed in The Operation and Maintenance Manual.

6.1.2 On termination of an Operational Restriction

A. The copy of the Operational Restriction held in the Operational File (HV) is to be overwritten with the word “CANCELLED” followed by

the cancellation date and again countersigned by each Senior Authorised / Authorised Persons for the system or installation.

B. The Copy of the Operational Restriction held in the Operation and Maintenance Manual is to be over written with the word "CANCELLED" followed by the date of the cancellation.

C. The termination of the Operational Restriction is to be recorded in the High Voltage Log Book.

6.2 Keys, Key Cabinets and Mimic Diagrams

6.2.1 Safety Locks

Before a Permit to Work is issued, and before a Competent Person commences work or testing, Safety Locks are to be applied at all points of isolation and at all points where Circuit Main Earths or where practicable Temporary Earths are applied.

Before a Sanction for Test is issued Safety Locks are to be applied wherever practicable at all points of isolation and at all points where Non-Removable Circuit Main Earths or Temporary Earths are applied. Working Locks are to be applied wherever practicable at all points where Removable Circuit Main Earths or Temporary Earths are applied neither Safety Locks nor suited padlocks are to be used for this purpose.

The keys for Safety Locks currently in use by Authorised Persons in conjunction with Permits to Work or Sanctions to Test are to be secured in one or more Safety Key Boxes. When in use each Safety Key Box is to contain the keys associated with only one Permit to Work or one Sanction for Test.

When not in use, Safety Locks and their keys (except those issued on a permanent basis to Competent Persons) are to be kept in the Key Cabinet.

6.2.2 Safety Key Boxes

A Safety Key Box is to have two locks, each of which is to have only one key, one being labeled "Safety Key Box – No**. Authorised Persons Key" and the other labeled "Safety Key Box – No**. Competent Persons Key"

After the Safety Locks have been applied, and before the Permit to Work or Sanction for Test is issued, the keys to all the Safety Locks are to be placed in a Safety Key Box and both locks of the Box are to be secured. When the Permit or Sanction is issued the Authorised Person is to issue the Competent Person's Key of the Safety Key Box to the Competent Person and is to retain the Authorised Person's key.

When in use each Safety Key Box is to contain the keys associated with only one Permit to Work or one Sanction for Test.

*** Denotes the Safety key Box Designation*

More than one Safety Key Box may be provided on any site. In such cases, each Competent Person's Key is to release only one Safety Key Box lock on that site, and each box is to bear a serial number ensuring positive identification within the site.

The Competent Person is to retain the Competent Persons Key until the Permit to Work or Sanction for Test has been cancelled.

When not in use, The Keys to the Safety Key Boxes are to be kept in the Key Cabinet.

6.2.3 Key Control Box

A Key Box with a Combination Lock is to be installed adjacent to the Key cabinet. The Duty Authorised Person's Keys are to be kept locked in this box when not in use.

No other keys are to be kept in the Key Control Box

The Authorising Engineer is to inform All Senior Authorised / Authorised Persons appointed for the system of the combination of the lock. No other persons are to know the combination. The combination settings are to be changed whenever an Authorised Persons appointment has been suspended or cancelled.

6.2.4 Key Cabinets

Except for any key plates in use the key plates holding the working keys are to be kept in a closed and securely locked Working Key Cabinet installed, with the Document Cabinet, in a room to which Authorised Persons have free access at all times.

Except for any key plates in use the key plates holding the duplicate keys are to be kept in a closed and securely locked Duplicate Key Cabinet labelled "Electrical Distribution – Duplicate Keys", permanently installed in a location to which Authorised Persons are to have access at all times (other than the room in which The Working Set is kept).

The Working Key Cabinet and the Duplicate Key Cabinet are to be fitted with identical locks for which there are only two keys. The keys are to be labelled and held as follows one key, labelled "Authorised Person", is to be held by the Duty Authorised Person or locked in the Key Control Box; The other key, labelled "Authorised Person - Duplicate", is to be kept in a glass-fronted box in the same room as the Duplicate Key Cabinet. This box is to be made so that the glass front has to be broken before access to the key is gained.

A notice is to be affixed near to the glass-fronted box containing the Authorised Person's duplicate key stating, "Only the persons listed have authority to break the glass and withdraw the key". This is to be followed by a current list of Authorised Persons appointed for the systems and installations to which the key relates.

6.2.5 High Voltage Sub-Station Keys

There are to be two keys for each lock provided for:-

A. Low Voltage distribution switchgear including feeder pillars, and main intake switches supplied by distribution cables.

B. High Voltage switchgear and Equipment.

C. Substations, standby set houses and any building, part of a building or compound containing High Voltage Equipment.

Within the geographical area for which an Authorised Person is appointed, the keys for each substation, building or item of Equipment are to be attached to two appropriately sized key plates, one key plate being clearly labelled "Working Keys" and the other "Duplicate Keys".

Key plates are to bear the identification of the substation, building or item of Equipment to which the keys belong, or the purpose for which each key is intended.

In connection with these Rules and Procedures where keys are issued for regular or repeated use, to persons other than the Authorised Person, the specific use and purpose intended for the keys is to be detailed on a Standing Instruction issued to that person.

6.2.6 Lockable Document Cabinet

When the documents specified in these Rules are not in use they are to be kept in a lockable Document Cabinet installed, with the Working Key Cabinet, in a room to which Authorised Persons have access at all times.

When any Document Cabinet associated with these Rules is not in use it is to be closed and securely locked and the key retained in the Working Key Cabinet under the control of the Duty Authorised Person.

Where the volume of documents is small and there is adequate space, it is permissible to keep them in the Working Key Cabinet.

6.2.7 Mimic Diagram

A Mimic Diagram is to be provided for any High Voltage System.

A Mimic Diagram is to show as a minimum the electricity distribution system and Equipment that is under the control of the Authorised Person, from all sources of supply up to and including Low Voltage main intake switchgear. For large installations the Mimic Diagram may finish at the low voltage substation Feeder Pillars

Sub-Stations and Low Voltage main intake switchgear are to be appropriately labelled on the Mimic Diagram with the location name and identification code.

The Mimic Diagram is to be permanently displayed in the room in which the Working Key Cabinet is located. The status of the electricity distribution system and Equipment is to be visible at all times, but the Mimic Diagram is to be lockable to prevent unauthorised adjustment.

6.3 The Use and Provision of Protective, Test and Earthing Equipment

6.3.1 General

Protective Equipment, Test Equipment and earthing Equipment is to be maintained and stored in accordance with the manufacturer's or supplier's instructions, and it is to be inspected by the user on each occasion before use, and is to be properly used.

The location of Protective Equipment, Test Equipment and portable earthing Equipment is to be prominently displayed adjacent to the Working Key Cabinet.

Where Protective Equipment, Test Equipment and portable earthing Equipment is kept on site for use in connection with these Rules, details and copies of the equipment specification, operation, maintenance and, where appropriate, calibration, are to be kept in the Operational File (HV).

Unless more frequent intervals are specified by the manufacturer or supplier an Authorised Person is to inspect each item of Protective Equipment, Test Equipment and portable earthing Equipment, kept on the site, at least once a year and in accordance with the manufacturer's or supplier's instructions, to ensure that it is suitable for the use for which it is provided and it is maintained in a condition suitable for that use.

Where Protective Equipment, Test Equipment and portable earthing Equipment is found to be defective or faulty it is to be taken out of use and suitable precautions implemented to prevent further use. The inspecting Authorised Person is to instigate the appropriate remedial or replacement action where necessary. These inspections are to be recorded in the High Voltage Log and the Operational File (HV), as well as in any other maintenance and inspection record system.

The Senior Authorised Person is to examine the records every twelve months to determine that the maintenance and inspection is being carried out for Protective Equipment, Test Equipment and portable earthing Equipment kept on the site.

6.3.2 Protective Equipment

Appropriate Protective Equipment is to be provided and is to be readily available at all times to those who need it in connection with these Rules. Protective Equipment is to be used whenever necessary to prevent danger or, where appropriate, injury, and as required by these Rules.

Protective Equipment, in normal circumstances, is to be provided by the persons responsible for the work activities. Protective Equipment provided by the Competent Person may be used if the Senior Authorised Person and Duty Authorised Person agree, and such use is recorded.

Protective Equipment is to be inspected by the Competent Person for visible defects on each occasion prior to use to ensure that it is suitable for the use for which it is provided, and that it has been maintained in a condition suitable for that use, when properly used.

Any suspect item is to be reported to the Duty Authorised Person who is to consider its withdrawal and replacement.

6.3.3 Test Equipment

The Senior Authorised Person is to arrange for the necessary Test Equipment to be available when required in connection with these Rules.

Test Equipment is to be, where appropriate, calibrated in accordance with the manufacturer's or supplier's instructions.

Test Equipment is to be inspected by the user for visible defects on each occasion prior to use to ensure that it is suitable for the use for which it is provided, and that it has been maintained in a condition suitable for that use, when properly used. Any suspect item is to be reported to the Duty Authorised Person who is to consider its withdrawal and replacement.

Test Equipment provided by the Competent Person may only be used if the Duty Authorised Person agrees. The Test Equipment is to be inspected by the Competent Person for visible defects on each occasion prior to use to ensure that it is suitable for the use for which it is provided, and that it has been maintained in a condition suitable for that use, when properly used. Details of equipment used is to be recorded.

6.3.4 Earth Equipment

Before conductors are earthed a check is to be made by the Authorised Person or Competent Person using the equipment to confirm that the earthing Equipment to be used is of sufficient strength and current-carrying capability to discharge electrical energy to earth without danger or, where appropriate, risk of injury.

The appropriate manufacturers or suppliers proprietary earthing Equipment is to be used where it is available. Where none is available, purpose made earthing Equipment that has been approved by the Authorising Engineer is to be used.

Portable earthing Equipment is to be inspected by the user before each use to confirm that it is suitable for the use for which it is provided, and that it has been maintained in a condition suitable for that use, when properly used. Any suspect item is to be reported to the Duty Authorised Person who is to consider its withdrawal and replacement.

7 Health and Safety

7.1 Dangerous Occurrences

7.1.1 General

A Dangerous Occurrence is to be reported to the Duty Authorised Person by Competent Persons as soon as reasonably practicable.

The Duty Authorised Person is, without delay or as soon as practicable, to report the Dangerous Occurrence to the Senior Authorised Person / Authorising Engineer.

Any notifications or reports required to satisfy Statutory or other company requirements are to be issued in addition to the requirements of these Rules.

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013, require certain dangerous occurrences and accidents to be reported to the Enforcing Authority (HSE).

The Authorising Engineer is to investigate each Dangerous Occurrence and issue a report to the Contract Manager. The report is to be sufficiently detailed to enable the sequence of events leading to the occurrence to be determined. Where reasonably practicable the report is to include photographs taken before any items of equipment involved in the occurrence are disturbed.

7.2 Display of Permanent Safety Signs, Posters and Diagrams

7.2.1 Display of Permanent Safety Signs

Safety Signs, required by this section, are to be securely and permanently fixed.

A Warning Sign in accordance with Appendix A3.1 (1) Model Sign P1.1 is to be displayed in a prominent position outside every Sub-Station. The notice identifying the installation is to include an address or telephone number where the Duty Authorised Person can be contacted

A Warning Sign in accordance with Appendix A3.1 (2) Model Sign P1.2 is to be displayed on any pole which supports High or Low Voltage conductors or Equipment.

A Warning Sign in accordance with Appendix A3.2 Model Sign P2 is to be displayed on all Low Voltage main intake switches.

A Warning Sign in accordance with Appendix A3.3 Model Sign P3 is to be displayed on or adjacent to all remotely or automatically controlled generating sets.

Where a ‘Gas Flooding System’ is installed in a Sub-Station, or other area where ‘High Voltage’ is present, a Warning Signs with appropriate text shall be displayed in a prominent position.

7.2.2 Display of Posters and Diagrams

Where Compass Group has control of the danger, the Authorising Engineer shall carry out an assessment to determine the requirement and location for the display of information in connection with these Rules.

Information is to be displayed permanently in suitable and prominent positions. The areas to be considered for the display of information in connection with these Rules are to include every Intake and Distribution Sub-Station, High Voltage Standby Set House and the High Voltage Control Centre.

The only posters that **must** be displayed at the above locations are the Emergency Procedures for an Electric Shock Casualty (First Aid) and The Electricity at Work Regulations 1989.

A Single Line Diagram(s) of the system(s) **must** Also Be Displayed

Other information and posters that may be displayed include:-

A. Extracts from these Rules.

B. Other relevant Health and Safety Information.

7.3 Emergency First Aid Training

7.3.1 General

All persons employed on the installation, maintenance or operation of Electrical Equipment are to be given training in Emergency First-Aid.

Training in emergency First-Aid is to be provided by occupational health staff or by organisations whose training and qualifications for First-Aiders are approved by the Health and Safety Executive for the purposes of the Health and Safety (First-Aid) Regulations

Training courses must include Resuscitation (as appropriate for the treatment of electric shock); and if deemed necessary any of the following items:-

A. Treatment of burns;

B. Control of bleeding;

C. Treatment of the unconscious casualty;

D. Contents of First-Aid boxes and kits;

E. Communication.

7.4 Audit of Safe Systems of work and safety Procedures

7.4.1 Authorising Engineer

At random intervals', not exceeding twelve months, the Authorising Engineer is to review the appointments of all Senior Authorised / Authorised Persons. These reviews should pay particular attention to the operating records, the issue and cancellation of permits and sanctions and should formally advise on any training or retraining considered necessary, including when it should be received. These reviews should include a meeting with the Senior Authorised / Authorised Person, an inspection of the systems or installations to which their appointment refers, and where deemed necessary a practical assessment.

At intervals not exceeding three years the Authorising Engineer is to undertake comprehensive audits of the safe systems of work and safety procedures required by these Rules. Separate audits are to be carried out for each site for which the Authorising Engineer has appointed Authorised Persons.

As a minimum, the procedures listed below are to be checked as part of each three yearly audit:-

A. As part of the desk audit, review the annual audits and ensure that:

i. A sample of the Limitation of Access, Permit to Work or Sanction for Test issued have been correctly completed and used in accordance with these Rules.

ii. Each operation has been correctly recorded in the High Voltage Log Book.

iii. The Operational file (HV) contains all the information required by these Rules, and that it is being kept up to date.

iv. Copies of all current certificates of appointment are kept in the Operational File (HV).

v. AP Training and Emergency First Aid training for all Authorised Persons is up to date.

vi. All Dangerous Occurrences have been reported.

vii. All Operating Restrictions have been correctly actioned.

viii. All Risk Assessments have been correctly compiled and properly recorded.

B. Visit the site and check that:

i. Safety Signs and Posters are displayed as required by these Rules.

ii. Sufficient Safety Locks and safety Boxes are held and are correctly used.

iii. The keys held on each Working and Duplicate key plate are correct and only operate the locks at the Sub-Station to which they refer, and that Key Plates are correctly held in the key Cabinets.

iv. The Duty Authorised Person Key is being held in the Key Control Box and that the combination is only known by the current Authorised Persons for the system or installation to which it applies.

v. All documents are held in the Lockable Document Cabinet.

vi. The Mimic Diagram correctly indicates the current configuration of the system.

vii. Adequate protective, test and earthing equipment is held, all items are fit for purpose and in good condition and that regular checks are being carried out and recorded.

viii. Switchgear and Equipment in use is being maintained and is in good condition.

Ascertain whether work on High Voltage equipment is being carried out in accordance with these Rules. Where considered appropriate, initiate and witness switching operations carried out by the Authorised Persons from the writing and countersignature of the Switching Schedule to the completion of the High Voltage Log Book.

A written report of the audit is to be compiled, listing satisfactory items seen, any deficiencies found and recommendations made. The report is to be issued to the Senior Authorised Person for action as necessary. A copy of the report with a summary of the findings is to be issued to the Manager with responsibilities for engineering.

The Senior Authorised Person is to acknowledge receipt of the audit report, make any comments considered necessary and compile an action plan in consultation with the Authorising Engineer. The Authorising Engineer should review progress on the action plan at the next audit.

7.4.2 Senior Authorised Persons

Senior Authorised Persons are to monitor the performance of the Competent Persons in carrying out their duties under these Rules. Monitoring is to be carried out on a continuing basis and is to include:-

A. Visiting worksites and communicating safety issues.

B. Visiting Sub-Stations, Switchrooms and electrical enclosures to ensure that high standards of tidiness are maintained and the availability of appropriate safety equipment.

Senior Authorised Persons are to take action to rectify and report in writing to the Authorising Engineer on any deficiencies found. A copy of the report is to be placed in the Operational File (HV).

Senior Authorised Persons must inspect all HV Switchrooms and Sub-Stations at intervals not exceeding three months, the inspection should be recorded in the High Voltage Log.

8 Appendices

A1.1 Model Letters of Appointment for Authorising Engineers

LETTER OF APPOINTMENT AS AUTHORISING ENGINEER
HIGH VOLTAGE SYSTEMS (HV)

Dear **[Authorising Engineers Name]**

Being satisfied that you are suitably qualified and meet the requirements of section 2.2 of the Compass Group Safety Rules and Procedures for High Voltage Systems, I hereby offer you the appointment as Authorising Engineer for **[Scope of Appointment]** and to undertake the duties set out in section 2.2 of the Compass Group Safety Rules and Procedures for High Voltage Systems until further notice. However this appointment will be reviewed and reconfirmed at three yearly intervals.

Please confirm your acceptance of this appointment by signing and returning to me a copy of this letter with the acceptance completed and signed by yourself.

Yours Sincerely,

Signed: _____ Date: _____
(*Technical Director*)

ACCEPTANCE OF APPOINTMENT AS AUTHORISING ENGINEER

Dear **[Technical Directors Name]**

I acknowledge receipt of your letter dated **[Letter Date]** offering me the appointment as an Authorising Engineer for **[Scope of Appointment].**

I confirm that to the best of my knowledge, I satisfy the requirements for appointment as an Authorising Engineer indicated in section 2.2 of the Compass Group Safety Rules and Procedures for High Voltage Systems.

I accept the responsibilities of the Authorising Engineer and will, to the best of my ability, carry out the Authorising Engineer's duties as set out in the Compass Group Safety Rules and Procedures for High Voltage Systems.

I note that I am required to attend and Authorising Engineer training course and an Authorised Person (HV) training course at intervals not exceeding three years.

Yours Sincerely,

Signed: _____ Date: _____
(*Authorising Engineer*)

A1.2 Model Authorised Person Certificate of Appointment

Certificate of Appointment for an Authorised Person HV

This is to certify that:

Name: ..... of Compass Group

Employed as an: .....

Having attended the requisite training courses and satisfied the Authorising Engineers as to his competence and knowledge of the system(s) is appointed Authorised Person (High Voltage Systems) for the purpose of carrying out switching, isolating, testing and earthing of HV systems as set out below for the period of validity of this certificate.

Issue date: ..... Expiry date: .....
(Appointment period not to exceed 3 years)

Duties of the HV Authorised Person:

1. Carry out risk assessments for HV work
2. Prepare and approve HV switching schedules
3. Carry out switching operations on HV equipment
4. Isolate and earth HV apparatus for work.
5. Issue Safety Documentation to allow Works on and Access to Systems and Areas under their control
6. Carry out or witness HV tests on new or modified circuits.
7. Ensure all Works carried out on Systems or in Areas under their control comply with ESS Rules and Procedures (SRP01) and all current Legislation.

Scope and Restrictions:

1. This certificate applies only to HV systems within the boundary of: .....

.....

Appointment:

Appointed by:.....(Name) .....(Signed)
Contract Manager

Endorsed by:.....(Name) .....(Signed)
Authorising Engineer

Acceptance:

I hereby certify that I fully understand the limits of my authority as specified above. I undertake to carry out all procedures on electrical apparatus in accordance with the current edition of ESS Electrical Safety Rules and Procedures, the Electricity at Work Regulations 1989 and all-existing site standing instructions.

Accepted by:.....(Name) .....(Signed)
Authorised Person

A1.3 Model Senior Authorised Person Certificate of Appointment

Certificate of Appointment as Senior Authorised Person HV

This is to certify that:

Name: ..... of Compass Group

Employed as an: .....

Having attended the requisite training courses and satisfied the Authorising Engineers as to his competence and knowledge of the system(s) is appointed Authorised Person (High Voltage Systems) for the purpose of carrying out switching, isolating, testing and earthing of HV systems as set out below for the period of validity of this certificate.

Issue date: ..... Expiry date: ..... .
(Appointment period not to exceed 3 years)

Duties of the HV Authorised Person:

1. Carry out risk assessments for HV work
2. Prepare and approve HV switching schedules
3. Carry out switching operations on HV equipment
4. Isolate and earth HV apparatus for work.
5. Issue Safety Documentation to allow Works on and Access to Systems and Areas under their control
6. Carry out or witness HV tests on new or modified circuits.
7. Ensure all Works carried out on Systems or in Areas under their control comply with ESS Rules and Procedures (SRP01) and all current Legislation.
8. Ensure that all Protective, Test and Portable Earthing equipment is recorded, inspected and calibrated in accordance with the manufacturers' recommendations.

Scope and Restrictions:

1. This certificate applies only to HV systems within the boundary of: .....:

.....

Appointment:

Appointed by:.....(Name) .....(Signed)
Contract Manager

Endorsed by:.....(Name) .....(Signed)
Authorising Engineer

Acceptance:

I hereby certify that I fully understand the limits of my authority as specified above. I undertake to carry out all procedures on electrical apparatus in accordance with the current edition of ESS Electrical Safety Rules and Procedures, the Electricity at Work Regulations 1989 and all-existing site standing instructions.

Accepted by:.....(Name) .....(Signed)
Authorised Person

A1.4 Model Competent Person Certificate of Appointment

HIGH VOLTAGE ELECTRICAL SYSTEMS
COMPETENT PERSON COMPETENCY CERTIFICATE

DECLARATION

I hereby declare that I have read the Compass Operational Policies and Safety Rules and Procedures for High Voltage Systems, they have been explained to me and that I understand and will follow them.

I agree to act as a Competent Person (HV) to the extent defined on the Authorisation Certificate issued to me.

Name:_____* Signature: _____

Date:_____ (Valid for 3 Years from Date of Issue)

CERTIFICATE OF AUTHORISATION

I hereby certify that _____* is appointed as a Competent Person (HV) as defined in the Compass Safety Rules and Procedures for High Voltage Systems, for the following High Voltage Systems on the _____contract:

High Voltage Switchgear High Voltage Cables High Voltage Transformers
Protection Relays

AUTHORITY

In accordance with Compass Safety Rules and Procedures for High Voltage Systems the Competent Person named above is Authorised to:

1. Carry out work or testing on electrically isolated and earthed (by HV AP) High Voltage Equipment using approved test instruments.

2. Under the supervision of an AP (HV) carry out live diagnostic testing on Low Voltage Equipment.

Appointed By:

Name:_____* Title:_____ *

Signature:_____ Date:_____

Appointment Endorsed By:

Name:_____* Title:_____ *

Signature:_____ Date:_____

* Please Print

A2.1 Model Switching Schedule

HV Switching Schedule

No: ..... Site: ..... Locations(s): ..... Sheet No ..... of .....

Proposed Date: ..... Operational Requirement: .....

Written by: ..... Signature: ..... Approved By: ..... Signature: ..... Date: .....

Operation No	Location and Equipment	Operation, Reason and Safety Precautions	Items Required	Date and Time	AP Initials

A2.2 (1) Model Permit to Work (Left Hand Side)

Permit To Work On High Voltage Systems

Permit to Work No XXXXXX.

1. ISSUE: Issued to: ..... Employed By: .....

I hereby declare that it is safe to work on the following HV equipment which is dead, isolated from all live conductors and is connected to earth

.....

..... **All other Equipment should be deemed Unsafe**

Isolation. The Equipment is isolated from all live conductors at the following points:

.....

.....

.....

Earthing. The Equipment is earthed at the following points:

.....

.....

.....

Danger Signs are posted at:

.....

.....

Other Precautions:

.....

.....

.....

Work to be carried out:

.....

.....

Automatic Fire Protection has been rendered inoperative ***Yes / No / N/A** ***Delete as appropriate**

Signed: ..... Name: ..... Date: ..... Time: .....

(Authorised Person) (Capitals)

2. RECEIPT: I hereby declare that I accept responsibility for carrying out work on the equipment as detailed on this Permit and that no attempt will be made by me, or any other person under my control, to carry out work on any other equipment.

Signed: ..... Name: ..... Date: ..... Time: .....

(Competent Person) (Capitals)

Note: Once issued and receipted, this document must remain under the control of the Competent Person until all work is finished when it must be cleared and returned to the Authorised Person.

3. CLEARANCE: I declare that the work above has been *completed / *stopped and that all persons under my charge have been withdrawn and warned that it is no longer safe to work on the apparatus specified on this Permit to Work and that gear, tools and additional earthing connections are all cleared. *Delete as appropriate

Signed: ..... Name: ..... Date: ..... Time: .....

(Competent Person) (Capitals)

4. CANCELLATION: I declare that The Equipment is to be * Returned to Service / Rejected for rework under a new Permit to Work. **This Permit to Work is hereby cancelled** *Delete as appropriate

Signed: ..... Name: ..... Date: ..... Time: .....

(Authorised Person) (Capitals)

A2.2 (2) Model Permit to Work (Right Hand Side)

Isolation and Earthing Diagram

Associated Switching Schedule Reference No: …… Dated: ……

Additional Information:

……

……

……

Point(s) of Work Positively Identified and Point of Work Sign(s) Posted *Yes / No *Delete as appropriate

Signed: …… Name: …… Date: …… Time: ……

(Authorised Person) (Capitals)

Signed: …… Name: …… Date: …… Time: ……

(Competent Person) (Capitals)

A2.3 (1) Model Sanction for Test (Left Hand Side)

Sanction for Test on High Voltage Systems

Sanction For Test No XXXXXX

1. ISSUE: Issued to: ..... Employed By: .....
Who is responsible for carrying out testing of the following HV Equipment:

_____

_____

The equipment detailed below has been isolated for this purpose from the remainder of the syst:em and must not be reconnected at any point without the authority of the Authorised Person. Work on and operation of any part of the isolated equipment must be carried out in strict accordance with the method statement and the requirements of Electrical Safety Rules and may be carried out without further reference to the Senior Authorised Person.

Isolation. The Equipment is isolated from all live conductors at the following points:

.....

.....

.....

Retained Earthing. The Equipment is to remain earthed at the following points:

.....

.....

Removable Earthing The Equipment earths can be removed during testing at the following points:

.....

.....

Other Precautions:

.....

.....

Tests to be carried out:

.....

.....

Automatic Fire Protection has been rendered inoperative ***Yes / No / N/A** ***Delete as appropriate**

Signed: ..... Name: ..... Date: ..... Time: .....

(Authorised Person) (Capitals)

2. RECEIPT: I accept responsibility for carrying out the testing on the equipment detailed on this Sanction for Test and no attempt will be made by me or by people under my charge to work on any other equipment or in any other area.

Signed: ..... Name: ..... Date: ..... Time: .....

(Competent Person)

3. COMPLETION: I declare that all persons under my charge have been withdrawn and informed individually that it is no longer safe to test the equipment detailed on this Sanction for Test and that all gear and tools are clear and that the equipment is returned to the same condition prior to the issue of the Sanction for Test, including the reconnection of any earths temporarily removed during the testing.

Signed: ..... Name: ..... Date: ..... Time: .....

(Competent Person)

4. CANCELLATION: I declare that The Equipment is to be * Returned to Service / Rejected for rework under a new Permit to Work.
This Sanction for Test is hereby cancelled *Delete as appropriate

Signed: ..... Name: ..... Date: ..... Time: .....

(Authorised Person) (Capitals)

A2.3 (2) Model Sanction for Test (Right Hand Side)

Isolation and Earthing Diagram

Associated Switching Schedule Reference No: ..... Dated: .....

Additional Information:

.....

.....

.....

.....

.....

Signed: ..... Name: ..... Date: ..... Time: .....

(Authorised Person) (Capitals)

Signed: ..... Name: ..... Date: ..... Time: .....

(Competent Person) (Capitals)

A2.4 Model Limitation of Access

Limitation of Access No **XXXXXX**

LIMITATION OF ACCESS

(High Voltage Electrical Distribution Equipment)

This document must not be used for work on equipment for which a Permit-to-Work is required.

1. ISSUE: To …… (Name in Capitals)

Who is in the employee of ……., and being a Competent Person, is hereby given permission to carry out the actions described below:

Location: _____

Reason for entry: _____

_____

_____

_____

NO OTHER ACTIONS SHALL BE CARRIED OUT

Precautions:

_____

_____

_____

_____

Automatic Fire Protection has been rendered inoperative Yes / No / N/A (delete as applicable)

Signed _____ **Time:** _____ **Date:** _____
(Authorised Person)

2. RECEIPT: I understand the scope of the work described and agree to take all necessary safety precautions to avoid danger.

Signed _____ **Time:** _____ **Date:** _____
(Competent Person in charge of the work)

3. COMPLETION / WITHDRAWAL: I declare that all persons under my charge have been withdraw and informed individually that access is closed to the location specified in this Access Permit and that all equipment and materials have been removed.

Signed **Time:** **Date:**

_____ _____ _____
(Competent person in charge of the work)

4. CANCELLATION: I declare that this Access Permit is cancelled

Signed _____ **Time:** _____ **Date:** _____
(Authorised Person)

A2.5 Model Standing Instruction

Instruction No XXXXXX

STANDING INSTRUCTION

(Complete precisely and legibly in BLOCK CAPITALS)

Name of Competent Person: _____ Employed by: _____

Issue date: _____ Expiry date: _____ (not more than 1 year from date of issue)

Location and identity of the equipment to which this Standing Instruction refers: _____

_____

_____Operating at _____ Volts ac rms* / dc nominal*

*delete as appropriate

Tasks or switching operations to be undertaken on the equipment specified above (to be carried out in the order in which they are listed):-

1)_____

2) _____

3) _____

4) _____

5) _____

Circumstances under which the above tasks or switching operations are to be undertaken, and special instructions and safety measures:-

_____

Signed _____ (Originating Authorised Person (HV)) Date _____

Name _____ Contact Tel.No _____

To be completed by the Duty Authorised Person

I hereby authorise the Competent Person named above to enter the stated location under my control and carry out the specified Tasks or Switching Operations outlined.

Signed _____ (Duty Authorised Person) Date _____

Name _____ Contact Tel. No. _____

Signature and name of all other Authorised Persons appointed for the system or installation of which the equipment forms part:-

Signature:_____ Name: _____
Signature: _____ Name: _____
Signature: _____Name: _____
Signature: _____Name: _____
Signature: _____Name: _____
Signature: _____Name: _____

Issue noted in High Voltage Log_____ (date) Termination noted in High Voltage Log _____ (date)

I (the Competent Person named above) acknowledge receipt of this Standing Instruction, have been shown and have had explained to me the equipment to which the Instruction refers, and confirm that I fully understand the tasks or switching operations listed above and the circumstances under which they are to be undertaken.

Signed _____ (Competent Person) Date_____

Name _____ In the employ of _____

A2.6 Model Specific Written Instruction

Instruction No XXXXXX

SPECIFIC WRITTEN INSTRUCTION

_____ for Particular Switching Operations in respect of _____
Specific Items of High Voltage Equipment

Name of Competent Person: _____

Employed by: _____

Location and identity of the equipment to which this Specific Written Instruction refers:-

_____

_____

Switching operations to be undertaken on the equipment specified above (to be carried out in the order in which they are listed):-	**Time and Date for each operation. (To be Recorded by the Competent Perso**
1) _____	Time/Date_____
2) _____	Time/Date_____
3) _____	Time/Date_____
4) _____	Time/Date_____
5) _____	Time/Date_____
6) _____	Time/Date_____
7) _____	Time/Date_____
8) _____	Time/Date_____
9) _____	Time/Date_____
10) _____	Time/Date_____

Circumstances under which the above switching operations are to be undertaken, and special instructions and safety measures:-

_____

_____

Signed _____ (The Authorised Person) Time _____

Name _____ Date _____

Contact Tel.No _____

I (the Competent Person named above) acknowledge receipt of this Specific Written Instruction and have had explained to me the switching operations required to which the Instruction refers, and confirm that I fully understand the switching operations listed above and the circumstances under which they are to be undertaken. I will record the time and date for each operation on this form in the space provided. Upon completion of the switching operations, I will return the Specific Written Instruction to the Authorised Person (HV)

Signed _____ (Competent Person) Time _____

Name _____ Date _____

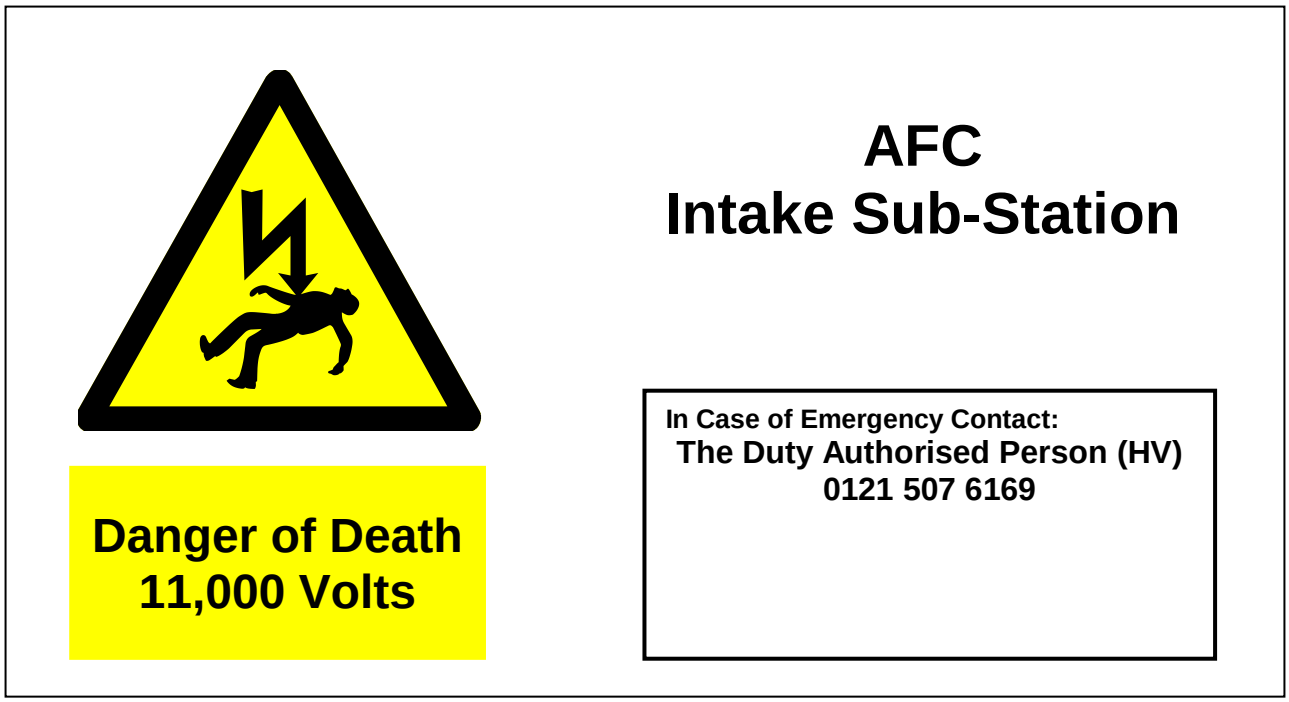
A2.7 Model High Voltage Log

	HIGH VOLTAGE LOG	
Date / Time	Location and Identity of Equipment	Event or Operation and Reason	Initial

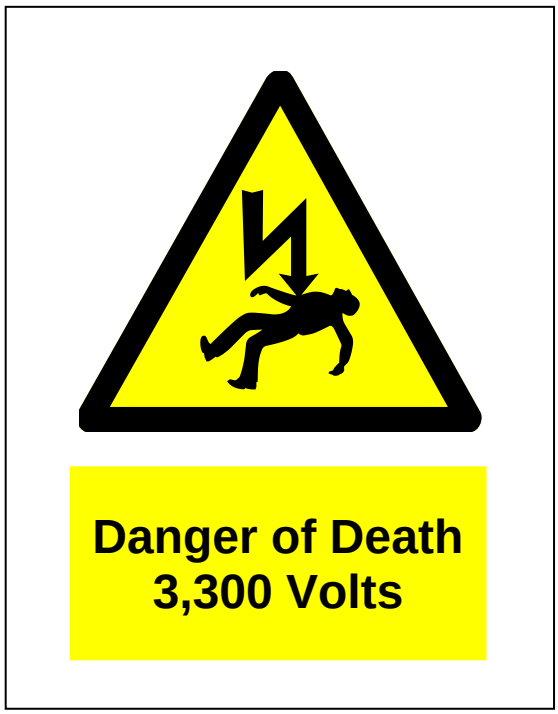
A2.8 Model Key Register

	AUTHORISED PERSON (HV) KEY REGISTER							
Key No / Description	Issued To	Company	Date	Time	Returned to AP	Date	Time

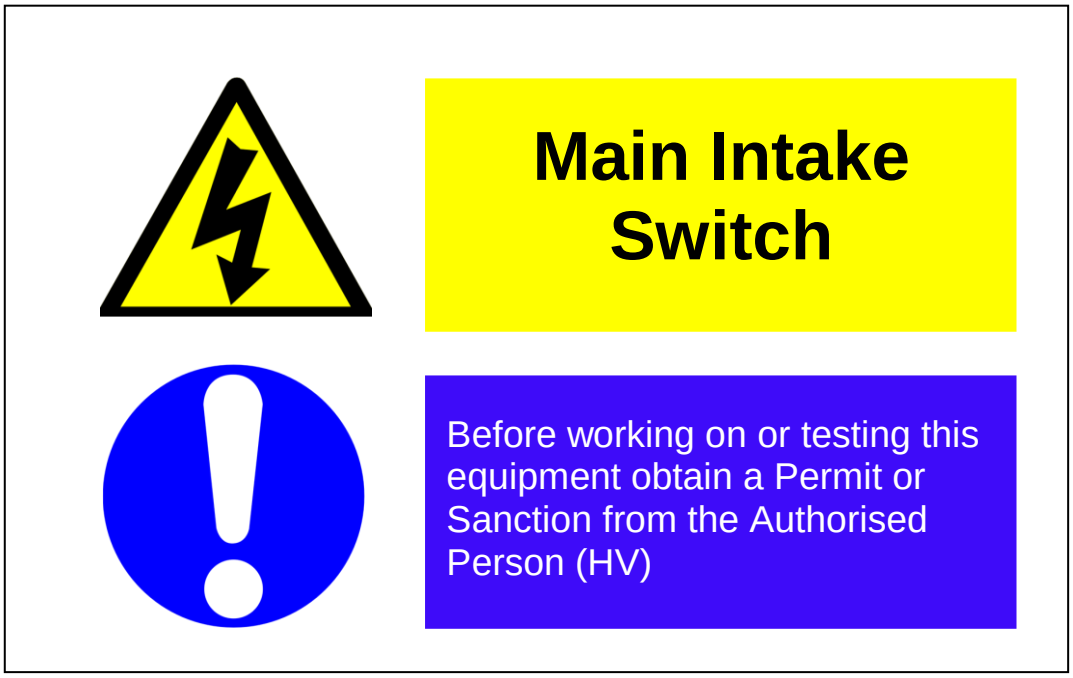
Appendix 3.1(1) Model Sub-Station Sign P1.1



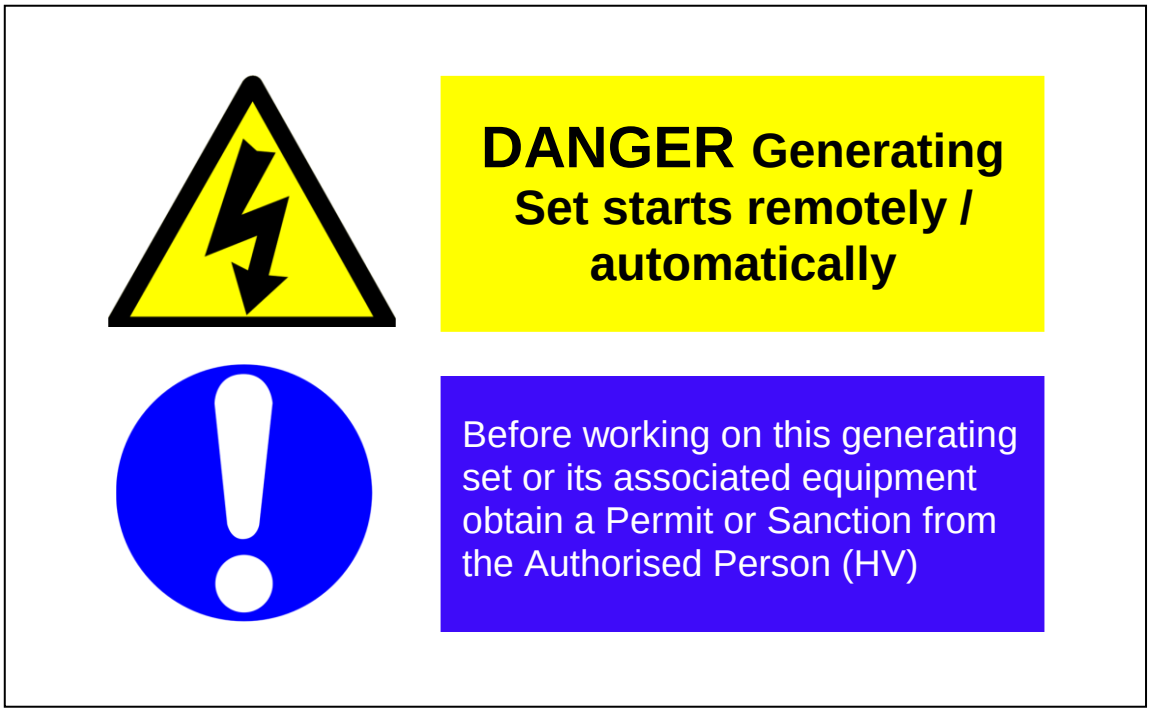
Appendix 3.1(2) Model High Voltage Warning Sign P1.2



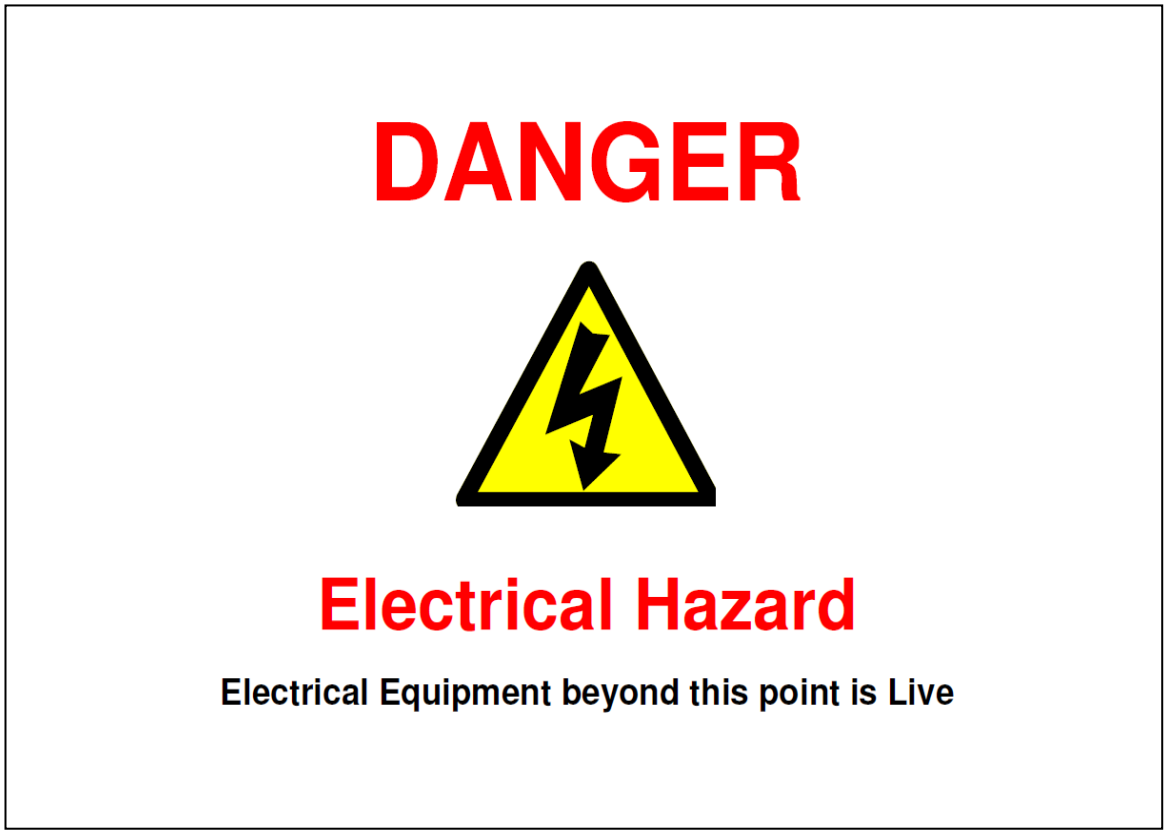
Appendix 3.2 Model Main Intake Switch Sign P2



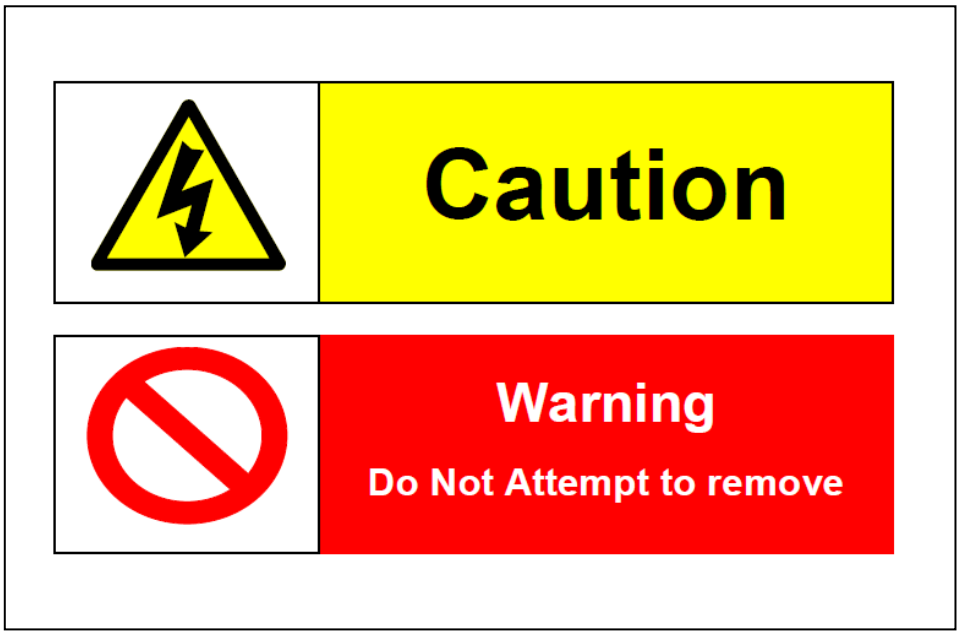
Appendix 3.3 Model Stand-By Set Warning Sign P3



Appendix 3.4 Model Danger Sign P4



Appendix 3.5 Model Caution Sign P5



Appendix 3.6 Model Point of Work Sign P6

Appendix A4 Associated Regulations and Documents

These Rules are based on and comply, where applicable, with the following Regulations and Guidance Documents:-

A. The Health and Safety at Work Act 1974.

B. Management of Health and Safety at Work Regulations 2006 (as amended).

C. Electricity Safety, Quality and Continuity Regulations 2002 (as amended).

D. Electricity at Work Regulations 1989 (as amended).

E. The Personal Protective Equipment at Work Regulations 1992 (as amended).

F. Manual Handling Operations Regulations 1992 (as amended).

G. Provision and Use of Work Equipment Regulations 1998 (as amended).

H. Construction (Design and Management) Regulations 2015 (as amended).

I. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013.

J. Health and Safety (Safety Signs and Signals) Regulations 1996 (as amended).

K. Health and Safety (First Aid) Regulations 1981 (as amended).

L. Workplace (Health, Safety and Welfare) Regulations 1992 (as amended).

M. Electrical Equipment for the use by electricians. Guidance Note GS38 (HSE).

N. Electricity at Work:- Safe Working Practices. HS(G)85 (HSE).

O. Keeping Electrical Switchgear Safe HS(G)230 (HSE)

9 Amendments

Revision 1.1 October 2009	Trading name changed from Compass Group to Eurest Services **A2.8** Addition of Model Key Register
Revision 1.2 April 2012	**1.1** Removal of "where practicable" from the use of safety locks paragraph. **1.4** Addition of "Working Lock" definition **1.4** Revision of "Safety Lock" definition **2.1** Revision of AP suspension criteria, and Qualifications for AE **2.2** Removal of age restriction from qualifications for AP **2.2** Revision of Qualifications for AP **2.3** Removal of age restriction from qualifications for SAP **2.3** Revision of Qualifications for SAP **3.3** Removal of need for Caution Signs at points of Earthing **4.1** Change of "Padlocks" to "Working Locks" in Removable Earths paragraph **4.3** Revision of warning tape colours to White and Red **4.5** Revision of Tables HV1 and HV2 to include Reviewing the Task Risk Assessment and Method Statement, and inclusion of the term "Confirm Dead" **5.2** and **5.3** Positive Identification of the Point(s) of Work or Test **7.2** Inclusion of Display Single Line Diagrams in Sub Stations as Mandatory
Revision 1.3 November 2013	Trading name changed from Eurest Services to ESS **A2.8** Addition of Model Key Register
Revision 1.4 October 2016	General formatting changes **A1.1 to 1.3** Revised Model Forms **1.4, 3.3, 4.5 and A3.6** Introduction of the Point of Work Sign
Revision 2.0 May 2017	Trading name changed to Compass Group Font Changed from Times Roman to Calibri Addition of Sub-Section Numbering **1.3** and **2.1** Addition of Co-Ordinating Authorising Engineer **11.3** and **2.2** Revision of Authorising Engineer Role **2.3** Revision of Authorised Person Role

(Cont)

(Cont) Revision 2.0 May 2017	**2.4** Revision of Senior Authorised Person Role **3.1** Inclusion of Point of Work Sign **3.3** Revision of Danger Sign Usage Criteria **3.5** Revision of Sub-Station Access Criteria **4.5** Reformat of tables HV1 and HV2 **5.1** Revision of Switching Schedule Description **5.5** Revision of Standing Instruction Description **7.2** Revision of Warning Signs **7.4** Change of Audit requirement to Authorised Person **A1** Revision of Model Appointment Letters and Certificates **A2** Revision of Model Safety Documents **A3** Revision of Model Signs **A1** Update of Associated Legislation and Guidance

Notes

Notes

RECEIPT

Compass Group: Safety Rules and Procedures for High Voltage Electrical Systems.

Compass Group reserves the right to amend any part of these Rules and Procedures from time to time. It may add new material or alter or remove existing material. The Authorising Engineer or Senior Authorised Person will notify you of any changes.

Please acknowledge receipt of these Rules by signing below, detaching the page and returning it to The Authorising Engineer.

A copy of this receipt will be placed in the site Operational File (HV).

We recommend that you keep a copy for your own records.

Name: ……..

Position: ……..

Site: ……..

Date: ……..

Signature: ……..