

# **High Voltage (HV) Electricity Supply Systems Utilising External Contractor as Authorised Person HV Operational Policy**

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## 1 Policy Statement

The Swansea Bay University Health Board, hereinafter referred to as “SBUHB” acknowledges their statutory responsibility to manage the electrical systems in each of its health premises in accordance with the *Health and Safety at Work etc., Act 1974* and in particular *The Electricity at Work Regulations 1989*.

This Operational Policy for the High Voltage (HV) system referred to as “HV Policy” is required due to its inherent dangers and supplements the *HTM documentation*.

This HV Policy, currently using Western Power Distribution (WPD) as the area distributor (or DNO as previously known) of these supply services and are under their own Policies’ and Procedure, however these need to be shared with the relevant SBUHB staff. Also any Contractor who is procured by the SBUHB appointed to act as their Authorised Person (APHV), which is the practical implementation of the SBUHB HV Policy from which it derives its authority, it meets the requirements of *paragraph 3.2a, Health Technical Memorandum (HTM) 06-03*.

## 2 Document Scope and Purpose

The HV systems serving the SBUHB healthcare properties shall be managed and operated in accordance with this document and *HTM 06-03* which should be followed as Best Practice.

Adherence to these two documents should normally be sufficient to comply with the legislation relevant to HV systems (*Electricity at Work Regulations 1989*).

The arrangements contained in this document have been agreed in writing by the Authorising Engineer (HV) appointed by the SBUHB.

The Policy applies to the HV systems in the following hospitals:

Help Desk External Telephone Nos:

Singleton Hospital: 01792 785231

Morrison Hospital: 01792 531240

(NPT Clinics and Communities, Tonna, Cimla, should all be accessed under the Morrison Hospital Help Desk number)

Internal Telephone Numbers:

Singleton Hospital: 33551

Morrison Hospital: 31240 and 33358

Summary of the installed equipment at each site is detailed in **Appendix 5**.

## 3 Roles and Responsibilities

The roles involved in the management and operation of HV Electrical Systems are defined in *WHTM 00: Best Practice Guidance for Healthcare Engineering, HTM 06-03*. Additional roles and/or duties are defined below.

### 3.1 Chief Executive’s Responsibilities (CEO)

The Chief Executive has overall responsibility for all aspects of the High Voltage Systems within all Health Board properties.

A person intending to fulfil any of the specific staff functions specified below should be able to prove that they possess sufficient skills, knowledge and experience to be able to perform safely the designated tasks.



### **3.2 Director of Finance & Performance - Designated Person (DP)**

The Director of Finance and Performance is the Executive Lead who has been appointed as the Designated Person with responsibilities for Electricity Management as defined under HTM 06-03 and is therefore responsible for ensuring that an appropriate Estates Structure has been formulated to professionally support and deliver the requirements of this policy. Furthermore, is required to communicate all relevant issues to the Board that may impact on the delivery and effectiveness of this policy.

### **3.3 Senior Management - Assistant Director of Operations - Estates**

The Assistant Director of Operations – Estates (ADoOE) is responsible within the Estates Department for ensuring that adequate trained resources and expertise is made available to formulate an Estates Structure. The ADoOE is also responsible (as directed by the DP) for nominating in writing, Estates Staff provided that said staff, have the relevant knowledge, training and experience as High Voltage Officers (HV Officer's) whose duties will be to ensure HV systems are operated and maintained safely, or monitored, if undertaken by a suitably qualified and experienced contractor, as described in Section 3.5 below.

The Assistant Director of Operations – Estates (ADoOE) has a strategic involvement within the Estates Department to ensure that changes in legislation that may affect the delivery of this policy are effectively communicated to the Estates Managers and Health Board AP (HV). The Estates Managers will also be required to submit capital bids to acquire statutory funding for ongoing risk reduction works as and when required. The Assistant Director of Operations – Estates (ADoOE) will also co-ordinate and collate HV alerts that are issued to the organisation to ensure that the Estates Managers and Health Board HV Officers 's (HV) have received the alerts and have responded appropriately, or raised any issues.

### **3.4 Health & Safety Electrical Sub-Group**

The Health & Safety Electrical Sub-Group meeting considers all issues related to electrical services. This group is chaired by the ADO-E. Actions will be raised by the Estates Managers and communicated amongst the group for consideration. Any proposed changes to HV systems need to be approved by the Electrical sub group and the AE HV. High risk actions that may impact on the quality of services will be escalated to the ADO-E and communicated to the DOF as necessary.

Where urgent decisions are required then a proposal can be agreed by the Designated Person if agreed by the AE HV the Estates Manager and ADO-E

Membership of this group will consist of:

- Estates Managers x Morriston and Singleton
- Site Estates Officers/ Managers (When required)
- Estates Health & Safety Officer
- Assistant Director of Strategy – Capital or representative
- Head of Health & Safety
- Authorising Engineer HV
- Authorising Engineer LV
- Health Board Authorised Officer HV
- NPT Estates Representative
- Assistant Director of Operations - Estates (Chair)
- Service Directorates representatives

**Appendix 1** names the individuals in the various roles.

### **3.5 Estates Managers (EM's)**

**The Estates Managers are NOT authorised themselves to operate or maintain the HV system, however they must ensure it remains operational, safe and fit for its intended purpose using the appointed AE and AP Contractor.**

The Estates Managers are appointed by the SBUHB and are responsible and authority to manage/operate and maintain the HV systems, under their control, to ensure they are operated and maintained safely.

**In general, for the day to day operations, these powers will be delegated to the Health Board appointed HV Officer or the appointed Authorised Person (HV) see 3.6 below.**

The Estates Manager shall manage/delegate:

- the work of the AP Contractor and may refer operational HV decisions by the AP Contractor to the Authorising Engineer (HV).
- the maintenance of Non-HV work such as building work and related building services in high voltage areas.

### **3.6 Health Board AP (HV)/HV Officer**

**The Health Board Officer (HV) are NOT authorised themselves to operate or maintain the HV system, however they must ensure it remains operational, safe and fit for its intended purpose using the appointed AE and AP Contractor.**

The Health Board Officer (HV) (This is a local arrangement not referred to in **HTM 06-03**) is an Operational Engineer with relevant experience and training, and delegated authority from the Estates Manager to manage the day to day operation of the HV system on a particular site with authority from the HV AE and be appointed in writing as per the HTM 06-03 AP(HV) .

The Health Board Officer (HV):

- Shall be trained to recognise the danger of HV systems maintained by the AP Contractor (see Section10 Training of Personnel)
- Using the form in **Appendix 6** shall transfer control of the HV systems to the AP Contractor following the guidance in **Appendix 3**
- Shall control the keys giving entry to the HV areas.
- May issue *Limitation of Access (LoA)* safety documents for Non-HV work but, where this may be determined as requiring the input of the HV AP appointed by the SBUHB and then only after consultation with the AP Contractor.

### **3.7 Authorising Engineer HV**

The duties of the Authorising Engineer (AE) HV in Chapter 4, HTM 06-03 shall apply in general to the AE HV, who has been appointed to that position by the Health Board.

Audit Reports shall be sent to the Designated Person and copied to the Assistant Director of Operations – Estates and Estates Managers and should be shared with the appointed HV Officers.

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The Authorising Engineer may if necessary, recommend the suspension or cancellation of the appointment of an Authorised Person (HV) or Health Board HV Officer and withdraw their certificate.

### 3.8 AP Contractor

The AP Contractor (This is a local arrangement not referred to in HTM 06-03 is a specialist contractor appointed by the SBUHB to receive Transfer and Control Certificates (ToCC) to allow operation, HV works and maintenance of the HV systems

If the AP Contractor's Authorised Person (HV) is of the opinion that a Competent Person (HV) is not carrying out work in accordance with HTM 06-03 or other HV guidance, or is working in an unsafe manner, the Authorised Person (HV), in consultation with the Health Board HV Officer, is to stop the work, have the equipment or installation made safe, and have the Competent Person (HV) removed from the working area. The AP Contractor shall remove an employee from the site and if necessary provide a replacement. Such actions would be subject to a review between the SBUHB and the AP Contractor.

The AP Contractor shall employ suitably qualified and experienced staff (Authorised and Competent Persons as defined in *HTM 06-03*).

Except in an emergency, the AP Contractor shall only undertake the duties following signed acceptance of a ToCC issued by the Health Board Officer (HV).

The AP Contractor shall be fully conversant with:

- The HV distribution for the site including possible impacts to Healthcare services, to include any connections to alternative technologies which import electricity to the site, i.e solar, wind, etc
- *HTM 06-03, Electrical Safety Guidance for HV installations*
- This HV Operational Policy
- *The Electricity at Work Regulations 1989*
- *Health and Safety at Work Act 1974*
- *Report of Injuries Diseases and Dangerous Occurrences Regulations 1985 (RIDDOR)*
- *Control Of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended)*

Any incident reports will also be copied to the Estates Manager. When the incident involves high voltage then the Authorising Engineer (HV) shall also be advised and will carry out an investigation.

The Authorised Engineer is available to provide advice to the Health Board HV Officer & AP (HV) on the issue of a LoA (*when and if required*).

If the AP Contractor considers the work to be beyond the scope of the Health Board HV Officer then the AP Contractor shall issue the LoA with the agreement of the EM and/or AE HV.

See **Appendix 4**.

## 4 Design, Operation and Maintenance of HV Electrical Systems

The SBUHB HV Policy specifies the requirements for Design, Operation and maintenance of HV electrical systems. Maintenance shall also include the buildings/enclosures and associated building engineering services but this work will normally be carried out by HB staff or contractors working under a LoA document. However, design should be undertaken by the relevant Project Manager where a Capital scheme includes for HV installation, this will include other Welsh Government schemes, e.g. solar/wind, etc



#### 4.1 Access Control to Dangerous Areas

HV switch rooms and other areas containing HV equipment shall be kept locked with access restricted to the Health Board Officer (HV). Visitors must be accompanied by the Health Board Officer (HV) and not interfere or touch any HV equipment in these areas. DNO's, i.e. WPD should inform the relevant site HV Officer of their attendance under normal maintenance conditions, this would differ to emergency supply issues.

#### 4.2 Limitation of access (LoA)

The Health Board Officer (HV) and AP (HV) can authorise access to the following people by issuing safety documents, a Permit to Work or a TOCC. The Health Board Officer (HV) and AP (HV) has authority to deny or withdraw access at any time:

- Officer (HV) or CP (HV) or Employees of the AP Contractor
- Those working under an LoA safety document
- Anyone working with one of the above and under their direct supervision

Keys giving access to HV areas and equipment shall be controlled in accordance with *paragraphs 6.1-6.6, General Precautions, of HTM 06-03* except that for Health Board Officer (HV).

The *Site Logbook* shall be completed by the Health Board Duty Officer (HV) or AP (HV) on issue and receipt of keys.

Where HV areas contain equipment belonging to the DNO (electricity infrastructure provider) their staff have a legal right to enter at any time which is usually arranged by some form of joint key arrangement. However, they should inform the site of their attendance if pre-planned, unless in an emergency where switching may be critical to continuation of service provision.

The Health Board Officer (HV), AP (HV) and the AP Contractor (under the contract) have the power to immediately exclude any person from the high voltage areas if they are considered to be acting in a manner likely to cause danger to themselves or others.

#### 4.3 Limitation of Access Safety Documents (LoA)

A *Limitation of Access* document and its use are defined in *Chapter 8 of HTM 06-03*. It is used for specific **Non-HV** work to be undertaken in a HV area under the supervision of the Health Board Officer (HV) or AP (HV). An example would be the painting of a door, meter reading, installing/testing fire safety systems, sweeping of floor surfaces etc.

A Health Board Officer (HV) or AP (HV) can issue/cancel a LoA as follows:

- A LoA for simple work will normally be issued by the Health Board Officer (HV) **in consultation** with the AP/HV or ultimately the AE (HV). Refer to **Appendix 8**
- If the work to be carried out is in close proximity to HV equipment, then, for safety reasons, the HV Officer AP (HV) will issue the *L.o.A* documents. The division of responsibility will form part of the training of the Health Board Officer (HV).

Estates managers such as the Health Board Officer (HV) shall explain the limitation of access relating to the extent of work to be carried out to the operational employee, who are not a HV Competent Person.

In addition HTM 06-03 clauses 4.23 to 4.29 inclusive, for Competent Persons should also be **explained to and understood** by operational employees

Paragraphs 4.23-4.29, as well as a statement that “The CP (HV) and any Assistants must NOT touch or interfere with the HV system” should be read and understood and issued with the LoA, this being recorded on the LoA.

#### **4.4 Monitoring/Review Procedure**

Since the HV Operational Policy has differences from HTM 06-03, additional audit checks will be undertaken by the AE (HV) on the following:

- Emergency procedures
- Training, certification and appointment of the HV Officers
- The use and issue of Safety Documents and Transfer Control Certificates
- A check on the work carried out by the HV Officers
- The replacement, refurbishment and maintenance programme and any Safety Action Bulletins or Hazard notices in relation to HV, or LV that could affect the system
- Design issues

### **5 Operating Documents**

Records for the operation and maintenance of HV electrical systems shall be available together with back-up copies, as detailed in *paragraph 1.16 of HTM 06-03*.

Suitable documents matching those in HTM 06-03 shall be purchased from TSO.

The following manuals and documentation must be available for the operation and maintenance of HV systems and are held in the HV Officers/Operational Manager's Office at each acute site.

#### **5.1 Operational Procedure Manual (HTM document)**

This holds the information listed in *paragraphs 8.12-8.17 of HTM 06-03*, and:

- Records of Appointments/Acceptances and Certificates for HV Officers (local procedure)
- Copy of HB contract with AP Contractor
- HV Operational Policy (this document)
- Policy for SF6 equipment gas escape (if applicable)
- Copies of Transfer of Control Certificates (ToCC)

#### **5.2 Operating and Maintenance Manual (HTM document)**

This holds the information listed in *paragraphs 8.18-8.20 of HTM 06-03* and:

- Site drawings showing HV system and standby generators
- Switchgear and transformer schedule for the system
- Protection grading charts for the system
- Maintenance and Inspection reports, see, *paragraphs 8.21-8.23, HTM 06-03*
- AP Contractor schedules of maintenance

### **5.3 Record Documentation Control**

The Health Board Officer (HV) named in **Appendix 1**, has responsibility for the control and upkeep of all Operating Records as above and those in *Chapter 8 of HTM 06-03*, for the sites under their control.

### **5.4 Safety Documents**

The AP Contractor shall prepare a *Safety Programme* and issue/cancel *Safety Documents* as defined in *HTM 06-03*.

Subject to written agreement, the AP Contractor can use his own safety documentation in place of the *HTM Safety Programme and Safety Documents* and will form part of the contract appointment process with the contracted AP (HV)

The AP Contractor shall send either the original or a copy of the *Safety Programme and Documents* to the Health Board Officer (HV) identified in **Appendix 1**.

If only copies of safety documents are retained on the NHS site, then the AP Contractor must demonstrate to the AE (HV) that the originals are available for inspection at any reasonable time and stored as required by *HTM 06-03*, e.g., retained for minimum 3 years.

## **6 Training of Personnel**

### **6.1 Training of AP Contractor staff**

The AP Contractor must ensure its employees are adequately trained and that a register of training is maintained.

This should include Cardio-pulmonary resuscitation, which should be reviewed and updated as and when required, also to encompass new methodology.

The HB may request at any time to view the training records and reserves the right to refuse access to employees of the AP Contractor whom the Health Board considers are not adequately trained.

### **6.2 Training of Health Board Officer (HV) in CPR**

Training of Health Board Officer (HV) will be arranged by the SBUHB directly, this may be undertaken by the Health Board's internal training department or by a suitable external provider, but will include cardio pulmonary resuscitation training, which should be reviewed and updated as required

### **6.3 Competency of Estates Managers/Health Board Officer (HV)**

Competency of the Estates Managers/Health Board Officer (HV), following training at an accredited HV course, will be assessed by the AE (HV), if they are deemed to be competent with the relevant site knowledge and experience, they will be appointed in writing by SBUHB on the recommendation of the AE (HV). Refer to **Appendix 4 of HTM 06-03**.

## **7 Programme for Maintenance of HV Systems**

The work shall be carried out as required in the contract between the SBUHB and the AP Contractor and the schedule of maintenance included in the Operational Procedure Manual. Any additional work specified by the manufacturer must also be undertaken and details recorded. i.e. Safety Action Bulletins (SAB)/Hazard Notices (HN)

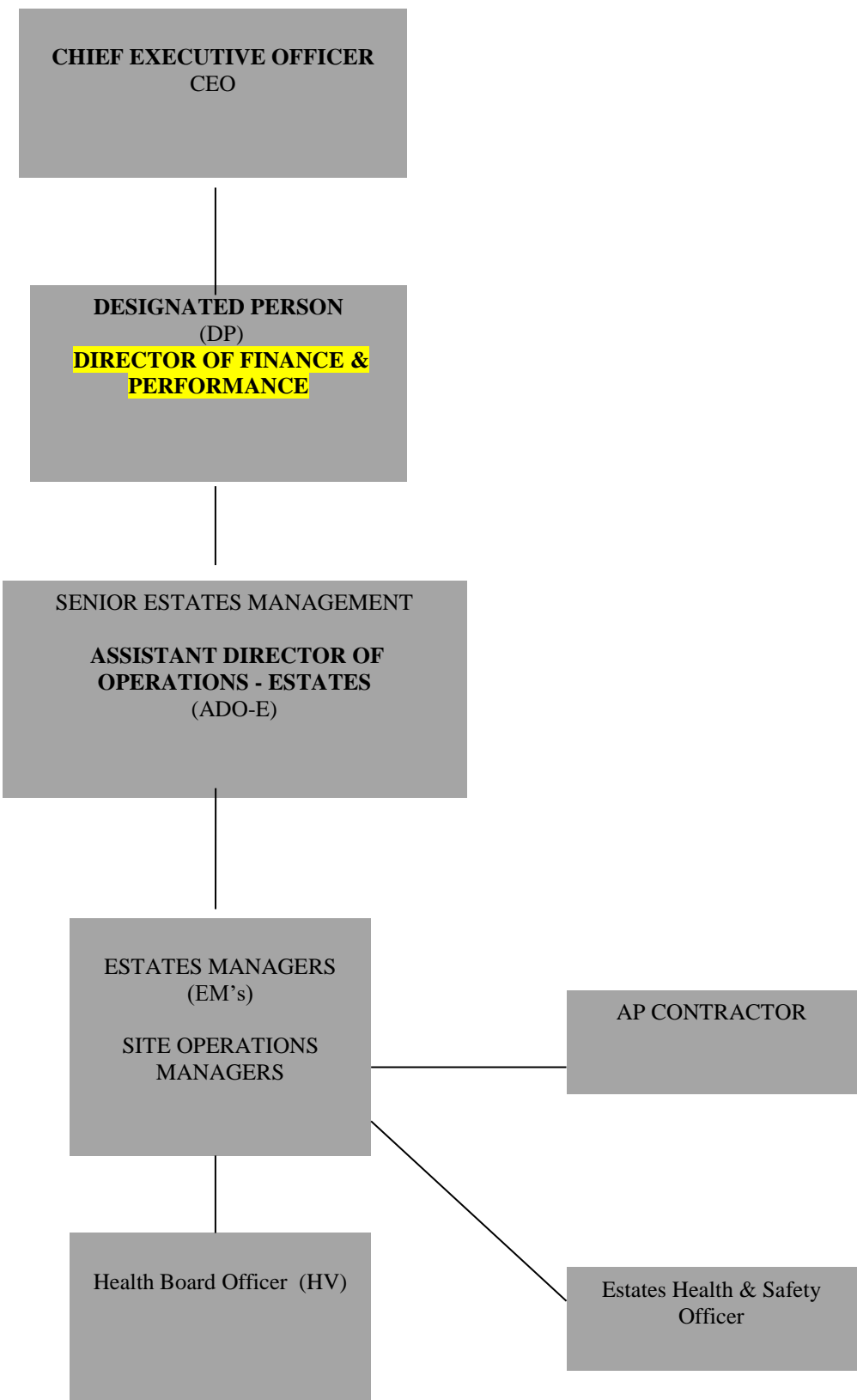
The Schedule of Maintenance should include as a minimum: (this does not preclude from the statement above)

- Inspection and cleaning of the HV equipment and associated protection relays
- Partial discharge testing of the equipment
- Maintenance and testing of the switchgear and arc control/insulating medium (as applicable) as well as protection relays, including secondary injection
- Maintenance and testing of all transformers, including any necessary testing of, and replacement of, insulating medium (as applicable) and cleaning, to include the compounds where they are located
- Maintenance and testing of battery tripping units (as applicable), ensuring no detrimental effect to the continuation of supply
- Any additional inspections due to SAB's or HN's

## **8 Operational Equipment**

All equipment required for switching, testing, earthing and safety padlocks shall be provided by the AP Contractor who shall be responsible for maintaining such equipment in good order. This shall include specialist equipment provided as part of the HV system by the SBUHB.

Appendix 1 - Management Hierarchy



## Appendix 2 - Definitions

### ***Health Technical Memorandum (HTM)***

A suite of documents issued by the Department of Health which provides guidance on technical issues with particular relevance to NHS healthcare facilities.

Due to differences in NHS policy between England and the devolved administration in Wales, the Welsh Parliament/Senedd Cymru may modify these documents for use in Wales.

*HTM 06-03, Electrical Safety Guidance for High Voltage Systems*. SBUHB which follows this guidance should normally be doing sufficient to satisfy the requirements of the *Health and Safety at Work etc. Act 1974* and the *Electricity at Work Regulations 1989*.

Users with access to the HOWIS intranet can find and download these documents on the Welsh Health Estates website at <http://howis.wales.nhs.uk/whe>

Users who do not have access to HOWIS intranet can access the full list of WHTM's/HTM's and associated Status Notes on the Welsh Health Estates internet website at [www.wales.nhs.uk/whe](http://www.wales.nhs.uk/whe) , but not download the WHTM documents.

### ***Transfer of Control Certificate***

The Transfer Document (**see Appendix 6**) allows the SBUHB to pass control of the HV electrical systems to the AP Contractor for switching or maintenance whilst ensuring that the effects on the hospital are fully understood and that any necessary precautions are in place to minimise effects on patient care and continuity of service provision and business continuity

## Appendix 3 - High Voltage Procedures

### **PROCEDURES TO BE FOLLOWED TO ISSUE A TRANSFER OF CONTROL CERTIFICATE**

**Either** the Health Board AP (HV) will contact the AP Contractor if there is a problem with the electricity supply to the hospital. During working hours the telephone contact number is (Western Power 0800 052 0400 or Scottish Power contact number 0151 609 4810 / 0151 609 4740), the Health Board AP (HV) and the AP Contractor will have previously made arrangements to carry out maintenance to the HV system.

1. The Health Board Officer (HV) or AP (HV) will check that the AP Contractor employee attending is suitably authorised. (This requirement will be part of the contract).
2. The Health Board Officer (HV) or AP (HV) will issue access keys and accompany the AP Contractor to the sub-stations to ensure the AP Contractor is familiar with their geographical location. Logbook entries are required.
3. The AP Contractor will create a Safety Programme. NOTE that this should include details of any LV switching required. **This will require the input of a site Health Board LV AP** to ensure no inadvertent loss of supply.
4. **The AP Contractor should identify with the Health Board Officer (HV) which parts of the LV system (if any) will be affected by the programme, in liaison with the Health Board LV AP**
5. The Health Board Officer (HV) after liaising with the Health Board AP (LV) will decide whether a *Permission for disconnection or interruption of electrical services* form (copy only in *HTM 06-02*) is required and make any arrangements necessary such as back up generation, where possible. It should be cross-referenced with the Transfer of Control Certificate, **Appendix 6** (ToCC), and the copy stored in the Operational Procedure Manual.
6. When arrangements are complete, parts 1 and 2 of the ToCC should be completed to pass control of that part of the HV system to the AP Contractor.
7. **The Health Board's AP Contractor will approve on behalf of the Health Board, HV work to be carried out on the Health Board's systems. The Health Board Officer (HV) will be trained or authorised to approve the HV work to be carried out, by the appointed AP HV on the HV systems in their control.**

**The issue of the ToCC means only that the HB has completed arrangements to protect the operation of the hospital (so far as possible), and the AP Contractor can start the HV work.**

8. All LV switching required will be carried out by the AP (LV) but only when directed by the AP Contractor who will also fit any safety locks and signs. This will be approved by the Health Board HV Officer and AP HV
9. On completion of the work, on the HV system, Parts 3 and 4 of the ToCC will be signed off by the AP Contractor and the Health Board Officer (HV) or AP (HV). The Mimic Panel must be adjusted by the AP Contractor in liaison with the HB Officer HV to represent any changes to the system. Any changes should be discussed/shared and approved with those involved in the HV/LV systems for awareness.
10. The Health Board Officer (HV) or AP (HV) shall ensure the Site Logbook for HV Systems is completed and all relevant paperwork be appropriately filed.

## Appendix 4 - Safety Training for Estates Managers and Health Board Officer HV or appointed AP (HV)

1. As part of the contract, the AP Contractor shall provide updates so the Estates Managers and Health Board Officer (HV) at each site can understand the dangers of a HV installation and are considered knowledgeable and competent to enter the HV sub-station/compounds alone without putting themselves at risk.
2. Training should be provided to ensure each employee is aware of the safety issues:
  - Competency to supervise visitors to the sub-stations/compounds and, if required, issue to (in consultation with the AP Contractor) and supervise a person working on a **LoA** document for minor building works, such as painting, re-lamping, checking fire alarms. Note that all work on LoA documents will require direct supervision by the Health Board Officer (HV) or AP Contractor. Training should be provided in relation to access requirements for work such as painting, checking emergency lighting and servicing fire extinguishers, or escorting contractors such as gardening, pest control or cleaning all require an awareness of the environment and potential hazards inside substations. This will ensure awareness of the potential dangers of electricity and the hazards that could be encountered, what behaviour and control measures are required when entering these areas, the role of personnel and the type of documentation which could be used to gain access.
  - Understands that neither the Health Board Officer (HV) nor any visitors, nor persons on LoA documents can under ANY circumstances touch or interfere in any way with the HV equipment. (This will also be emphasised on Health Board Officer (HV) appointment letters from the Health Board).
  - Are competent to decide when work located close to the HV systems should be risk assessed with the advice of the AP Contractor prior to issue of the LoA, however, the Health Board Officer (HV) would usually issue this document
4. Each nominated Health Board Officer (HV) will then be interviewed by the AE (HV) who will recommend (or not) that they be appointed, which is ultimately a Health Board decision.
3. If satisfied, the AE should certify competence in writing to the Designated Person for each nominated staff members to be appointed as a Health Board Officer (HV) using the draft form attached.

The Estates Managers will then arrange for them to be appointed by the HB using the draft forms and certificate attached.
5. **If the AP Contractor is unwilling to certify that a particular Health Board employee put forward for training is competent to act as an Health Board AP (HV) they should make their concerns known to the Estates Managers at the time.**
6. The training and certification process should be repeated every three years and will form part of the audit procedure conducted by the Authorising Engineer (HV).
7. Cardio-Pulmonary Resuscitation training will be arranged by the Health Board to nominated members of staff and reviewed and refreshed when required
8. The AE (HV) will also provide advice in the use and completion of *Limitation of Access* documents.





Appendix 5 - Summary of HV Electrical Systems

Morriston Hospital HV Schedule

Location	Equipment Type	Manufacturer	Model	KV / AMPS	Switch Type	Serial number	Year of manufacture	Condition / remarks	Protection Make	Protection Type
Main incomer	Circuit Breaker	Areva	Visax		Vacuum	677702/11A	2007	Good	MiCOM	MMLG 02
	Circuit Breaker	Areva	Visax		Vacuum	677702/11B	2007	Good	MiCOM	MMLG 02
	Circuit Breaker	Areva	Visax		Vacuum	677702/11J	2007	Good	MiCOM	MMLG 02
	Circuit Breaker	Areva	Visax		Vacuum	677702/11K	2007	Good	MiCOM	MMLG 02
Sub station 1	RMU 1B <a href="#">Photo</a>	Merlin Gerin	Ringmaster	11/630	SF6 - ok	100240626	2007	Good	Merlin Gerin	VIP 300
	RMU 1A <a href="#">Photo</a>	Merlin Gerin	Ringmaster	11/630	SF6 - ok	100240632	2007	Good	Merlin Gerin	VIP 300
	Transformer 1B	Merlin Gerin	KNAN (tap 1)			100229978	2007	Good		
	Transformer 1A	Merlin Gerin	KNAN (tap 1)			100229979	2007	Good		
Sub station 2	RMU 2C <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	100240631	2007	Good	Merlin Gerin	VIP 300
	RMU 2A <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	100248607	2007	Good	Merlin Gerin	VIP 300
	RMU 2D <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	102139382	2015	Good	Merlin Gerin	VIP 300
	RMU 2B <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	102139383	2015	Good	Merlin Gerin	VIP 300
	Transformer 2C	Merlin Gerin	KNAN (tap 1)			100230241	2007	Good		
	Transformer 2A	Merlin Gerin	KNAN (tap 1)			100230242	2007	Good		
	Transformer 2D	Merlin Gerin	KNAN (tap 1)			102139380	2015	Good		
	Transformer 2B	Merlin Gerin	KNAN (tap 1)			102139381	2015	Good		
Sub station 3	RMU CHP <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3C02310	2002	Good	Merlin Gerin	VIP 300
	RMU 3B <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02405	2002	Good	Merlin Gerin	VIP 300
	RMU 3D <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02407	2002	Good	Merlin Gerin	VIP 300
	RMU 3C <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02403	2002	Good	Merlin Gerin	VIP 300
	RMU 3A <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02406	2002	Good	Merlin Gerin	VIP 300
	Transformer 3D	Merlin Gerin	KNAN (tap 1)			CL5602	2002	Good		
	Transformer 3B	Merlin Gerin	KNAN (tap 1)			CL5603	2002	Good		
	Transformer 3C	Merlin Gerin	KNAN (tap 1)			CL5600	2002	Good		
	Transformer 3A	Merlin Gerin	KNAN (tap 1)			CL5599	2002	Good		
Sub station 4	RMU 4A <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02402	2002	Good	Merlin Gerin	VIP 300
	RMU 4D <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3B02408	2002	Good	Merlin Gerin	VIP 300
	RMU 4B <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 - ok	SR3A02472	2002	Good	Merlin Gerin	VIP 300
	RMU 4C <a href="#">Photo</a>	Merlin Gerin	Ringmaster 2	11/630	SF6 – no	SR3A02473	2002	Good	Merlin Gerin	VIP 300
	Transformer 4A	Merlin Gerin	KNAN (tap 2)			CL5604	2002	Good		
	Transformer 4C	Merlin Gerin	KNAN (tap 2)			CL5605	2002	Good		
	Transformer 4B	Merlin Gerin	KNAN (tap 2)			CL5606	2002	Good		



Serial Number.....

**Swansea Bay University Health Board  
ESTATES DEPARTMENT**

**Part 1 ISSUE REQUEST**

I, .....the representative of the AP Contractor.....wish to carry out  
the following high voltage works or switching at

..... Hospital.  
.....  
.....  
.....  
.....  
.....  
.....

Safety Document No (s): ..... will / will not\* be issued for this work.  
Your agreement to proceed is required taking full account of any local hospital restrictions relating to the HV/LV  
installation.

Signed:..... Print Name: .....

Designation: .....Date:..... Time: .....

**Part 2 AGREEMENT by Health Board Officer (HV)**

Agreement to the above works is made on behalf of the Swansea Bay University Health Board and note should  
be taken of the following circumstances (if none write NONE). Any arrangements necessary to protect hospital  
services have been completed.

Permission for disconnection form No.....  
.....  
.....  
.....  
.....  
.....

Signed:..... Print Name: .....

Designation: **Health Board Officer (HV)** .Date:..... Time: .....

**Part 3 CLEARANCE**

As the Authorised Person/Officer I hereby declare that the work for which this certificate was listed is now  
suspended/completed (delete as necessary) and that the system is safe and operational.

Signed:..... Print Name: .....

Designation: .....Date:..... Time: .....

**Part 4 RETURN**

Clearance is noted and the HV system accepted back on behalf of ..... Hospital

Signed:..... Print Name: .....

Designation: **Health Board Officer (HV)** Date:..... Time: .....

\* Delete where appropriate



## **TEMPLATE FOR HEALTH BOARD POLICY**

# **OPERATIONAL POLICY FOR HIGH VOLTAGE (HV) ELECTRICITY SUPPLY SYSTEM USING A CONTRACTOR AS AUTHORISED PERSON (HV)**

### **INSTRUCTIONS FOR USE AND RELATED DOCUMENTS**

1. This Draft HV Operational Policy is dependent for its authority on the Health Board HV Policy.
2. If not already appointed, the Health Board should appoint the Authorising Engineer AE (HV)
3. This front sheet gives instructions on the changes to be made to the draft policy by the Health Board and should be discarded following receipt of written approval of the HV Operational Policy (this document) by the AE (HV).
4. The Health Board must complete the blanks shown in this policy, select the optional paragraph 5.2, appoint a Manager responsible for the HV system who should nominate suitable staff to the positions of **HV Officer(s)** with the advice of the AE (HV) if required.
5. A suitable contract must be prepared to appoint an AP Contractor. It should include the Health Board HV Operational Policy as a mandatory section.
6. The AP Contractor should be appointed with the assistance of the AE (HV) if required.
7. The Health Board nominated Health Board Officer (HV), should undertake the relevant training as detailed in **Appendix 4** of the policy and be issued a Certificate similar to the attached draft, for each successful candidate. If unsuccessful the HV officer should attend an approved refresher course recommended by the AE (HV), e.g C&G City & Guilds accredited programme status
8. Following an interview by the AE (HV), the Health Board will appoint the Health Board Officer/ AP (HV) using the attached draft letters, issue a certificate and record the details in the Operational Procedure Manual.

## **CERTIFICATION BY AP CONTRACTOR OF A HEALTH BOARD Officer (HV)**

To the Estates Manager, \_\_\_\_\_ Health Board

I hereby certify that \_\_\_\_\_

1. Has received training suitable for an appointment by Health Board as Health Board Officer (HV) to enter sub stations and compounds used for high voltage (HV) systems and equipment owned by the Health Board and to review Safety Documents and issue LoA's (HV means systems operating at up to 11kV),
2. Possesses sufficient experience or technical knowledge to avoid danger that may be presented by access to any areas in which HV systems are present, and the equipment contained within
3. Understands that under NO circumstances can the Health Board Officer (HV), accompanied visitor, or persons working on LoA documents touch or interfere in any way with the HV equipment.

### **NB**

**This certification assumes that the Health Board will only appoint persons as Health Board Officer (HV) following a satisfactory interview by the Authorising Engineer (HV).**

**This certification applies ONLY to the HV systems and equipment at \_\_\_\_\_ Hospital,  
\_\_\_\_\_ HB**

Signed \_\_\_\_\_ AP Contractor

Date \_\_\_\_\_

**(A copy of this form should be sent to the Authorising Engineer (HV))**

## Model letter for appointing or re-appointing a Health Board Officer (HV)

### OFFER OF APPOINTMENT AS A HEALTH BOARD Officer (HV)

Dear \_\_\_\_\_ (name of prospective Health Board Officer (HV))

Following your attendance for training by the relevant approved training provider, a course on Cardio Pulmonary resuscitation, training on completion of an *Limitation of Access* safety document and satisfactory site assessment by the Authorising Engineer (HV), you are hereby offered an appointment as Health Board Officer (HV), as defined in the High Voltage Operational Policy for a period of three years commencing on \_\_\_\_\_ (date).

Please note that the appointment offered applies to \_\_\_\_\_ Hospital only.

**You are reminded that the appointment does NOT permit you to touch or interfere in any way with the high voltage equipment even under the direct supervision of an employee of the AP Contractor.**

If you wish to accept the appointment, please acknowledge receipt of the enclosed certificate by signing and returning a copy of the attached letter.

Print name \_\_\_\_\_

Signature \_\_\_\_\_

**(Estates Manager)**

Copies to: Operational procedure manual

## Model letter for accepting an appointment or re-appointment as Health Board Officer (HV)

### ACCEPTANCE OF APPOINTMENT AS A HEALTH BOARD Officer (HV)

Dear \_\_\_\_\_ (name of HV Manager)

I accept appointment as an Health Board Officer (HV) as defined in the \_\_\_\_\_ HV Operational Policy for a period of three years commencing on \_\_\_\_\_ (date).

I confirm that I have received a personal copy of the HV Operational Policy which I have read and understand.

I note that the appointment covers only the location(s) indicated on the certificate and offer of appointment.

I will, so far as is reasonably practicable, ensure that I, any visitors with me, and any others working with me or supervised by me on a *Limitation of Access* will avoid danger to ourselves and others, and will **NOT** touch or interfere with any high voltage equipment even under the direct supervision of an Authorised Person employed by the AP Contractor.

Yours sincerely

\_\_\_\_\_  
(Health Board Officer (HV) )

Copies to: Operational procedure manual

**SCHEDULE OF HV OFFICERS (TO BE STORED IN OPERATIONAL PROCEDURE MANUAL)**

<b>Name</b>	<b>Date of Delegation</b>	<b>Valid until</b>	<b>Signed (EM)</b>



**SWANSEA BAY UNIVERSITY HEALTH BOARD**

Certificate Number  
Expires Date/Year

**CERTIFICATE OF APPOINTMENT  
AS HEALTH BOARD AP (HV)**

Following issue by the Swansea Bay University Health Board of a letter of appointment, this certificate confirms that the person named below is appointed an Health Board Officer / Authorised Person (HV) as defined in the High Voltage Operational Policy (note as a HV Officers you are **NOT** authorised to operate the HV system).

The appointment applies only to the location set out below and is valid for three years from the date of issue.



***DIRECTOR of FINANCE & PERFORMANCE  
Designated Person HV  
Swansea Bay University Health Board***

Signed.....  
Health Board Officer/Authorised Person (HV)

Date.....

Signed.....

Date.....

Location: Entire high voltage system at \_\_\_\_\_ Hospital(s)

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