



PWYLLGOR IECHYD A DIOGELWCH HEALTH & SAFETY COMMITTEE

DYDDIAD Y CYFARFOD: DATE OF MEETING:	04 March 2024
TEITL YR ADRODDIAD: TITLE OF REPORT:	Estates Low Voltage (LV) Electricity Compliance
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	Andrew Carruthers, Executive Director of Operations
SWYDDOG ADRODD: REPORTING OFFICER:	Simon Day, Head of Maintenance & Engineering

Pwrpas yr Adroddiad (dewiswch fel yn addas)

Purpose of the Report (select as appropriate)

Er Sicrwydd/For Assurance

ADRODDIAD SCAA

SBAR REPORT

Sefyllfa / Situation

This follow up report from September 2023 is being brought to the Health and Safety Committee (H&SC) to provide assurance against a key area of the Health and Safety regulations. This report concerns the Electricity at Work Regulations 1989.

The intention is to show the progress that has been made from the low voltage (L.V) audit actions from September 2023.

The Health Board (HB) has a diverse property portfolio with a wide range of electrical installations, and electrical components in use in order to conduct its core business. The HB has introduced a range of policies and procedures to minimise the risks associated with the use of electrical equipment.

This report therefore sets out the following:

1. Identifies what legislation and guidance the HB is expected to comply with.
2. Provides information on what actions have been introduced by the HB to minimise risk.
3. Lists the recommendations, actions and timelines we have been issued with in order to improve compliance and resilience for electricity by our independent advisors.

Cefndir / Background

1. The Health and Safety at Work etc. Act (HASAWA) 1974 is the primary piece of legislation covering health and safety in Great Britain. It has over 100 delegated regulations under it, many of which are applicable to the healthcare working environment.

The legislative requirements for complying with electricity are set out by the 'Electricity at Work Regulations 1989', which are very broad, ranging from Regulation 1 through to Regulation 33. (These are identified in Appendix A for further information).

However, in healthcare estates and engineering the HB follows principal guidance documentation 'Welsh Health Technical Memorandums' (WHTM). These are set out for each operational discipline (for example - WHTM 06-02 for LV) as well as relevant British Standards, which combined, sets out clear definitive guidelines to ensure ongoing compliance is maintained.

This is also by how the HB is measured in terms of compliance by appointed Authorising Engineer's at NWSSP - Specialist Estates Services (NWSSP-SES) following their site audits and reports issued to the HB's Designated Person (DP).

2. The HB has introduced a range of measures to help support compliance with the regulations and guidance and these are set out below:
 - Officially appointed an Authorising Engineer (AE) from NWSSP-SES to provide expert advice and offer full independent audit & assurance for LV compliance.
 - As an operational estates function, we have trained and officially appointed in writing authorised persons (AP's) for LV at each acute site to be the professional and technical lead.
 - At each acute site, there are competent persons (CP's as electrical engineers) for LV to ensure safety and resilience of electricity hospital infrastructure.
 - The HB has developed and implemented a HB wide L.V electrical safety policy.
 - The HB has established a multi-disciplined Electrical Safety Group or (ESG) for the HB to discuss and manage electrical safety compliance for both L.V.
 - The HB has a Pre-Planned Maintenance system in place to undertake specific checks of electrical infrastructure.
 - The HB has in place an external contract to undertake both Portable Appliance Testing and Fixed Board testing across the organisation.
 - From a resilience perspective the HB has a number of sites that are equipped with IPS/UPS electricity backup systems that will ensure continued power to equipment in the event of power failure.
3. The HB's appointed AE has undertaken one annual HB wide audit for LV to measure compliance against the WHTM 06-02, a HB wide audit report was completed and the report was received as a draft version February 2024, Currently the HB is in discussion with the AE with regard to some of the actions and these will be added to the tracker at a later date.

Asesiad / Assessment

This report provides an update on the status of all outstanding recommendations and items to address as part of AE audits, and the significant progress achieved in recent months. While there are still many recommendations awaiting implementation, the HB is encouraged by the positive momentum demonstrated by the completion of many key recommendations since the last update.

Each recommendation received has been assigned to a specific staff lead and a timeline for its completion agreed. All recommendations are being carefully tracked by the Estates Compliance team, using a RAG rated tracker system.

Please find below the Tables 1.0 a and b illustrating the completed recommendation against what has been received.

**Table 1.0 a) -L.V
As of August 2023**

Site	No of Recs	H	M	L	Recs Completed to date				Recs Overdue agreed date	Assurance Rating	
					H	M	L	Total			
BGH	9	1	7	1	1	4	0	5	0	R.A & L.A	
WBH	21	7	12	2	5	11	1	17	0	L.A	
PPH	27	1	3	7	0	0	1	1	0	L.A	
GGH	25	2	8	15	0	1	4	5	3	L.A	
HB Wide	8	0	6	2	0	1	0	1	0	L.A	
	Total recs=90				Total.Completed.recs=29						

**Table 1.0 b) -L.V
As of February 2024**

Site	No of Recs	H	M	L	Recs Completed to date				Recs Overdue agreed date	Assurance Rating	
					H	M	L	Total			
BGH	9	1	7	1	2	4	0	6	1	R.A & L.A	
WBH	21	7	12	2	5	12	1	18	3	L.A	
PPH	27	1	3	7	2	4	12	18	9	L.A	
GGH	25	2	8	15	1	2	5	8	12	L.A	
HB Wide	8	0	6	2	0	1	0	1	4	L.A	
	Total recs=90				Total.Completed.recs=51						

Although many of the recommendations have been completed, due to the demands of day-to-day operations, certain actions have been overlooked, resulting in their overdue status. It is important to note that these actions have been delayed solely due to operational pressures. These risks do not pose any immediate danger to the Health Board's operation.

Reassessment and realistic timestamps:

To rectify this situation, the Health Board has reassessed each overdue action and assigned realistic and achievable timestamps for completion. This approach will ensure that these actions are appropriately prioritised and integrated into operational workflow.

Action plan PPH

- (Recommendation 7)* Operational Procedure Manual. (Target Date 04/12/2024)
- (Recommendation 8)* Designated AP office. (Currently utilising an area of the Estates office as an AP station)
- (Recommendation 9)* Emergency Plans in Operational Procedure Manual. (Target Date 04/12/2024)
- (Recommendation 10)* Security of electrical infrastructure. (Target Date 31/05/2024)
- (Recommendation 13)* Site Schematics. (Target Date 20/07/2024)
- (Recommendation 15)* Switch gear caged off. (Target Date 20/08/2024)
- (Recommendation 17)* Full maintenance schedule for switch gear. (Target Date 04/12/2024)
- (Recommendation 21)* Water ingress into switch gear room in new DSU. (Target Date=27/03/2024)

(Recommendation 26) annual Load test of 110 % on generators (generators run 10% over the full 100% requirement of the building). (Currently working on a solution with the AE)

Action Plan GGH

(Recommendation 1) Minimum of three authorised persons at GGH. (Discussed with the AE that we do not have the resource required to achieve 3 AP's)

(Recommendation 7) Up to date site schematics. (Target Date 20/07/2024)

(Recommendation 9) Emergency Plans in Operational Procedure Manual. (Target Date 04/12/2024)

(Recommendation 12) Switching of the low voltage ring system within Operational Procedure Manual. (Target Date 04/12/2024)

(Recommendation 13) annual Load test of 110% on generators (generators run 10% over the full 100% requirement of the building). (Currently working on a solution with the AE)

(Recommendation 15) Security of electrical infrastructure. (Currently working on a solution with the AE)

(Recommendation 16-18) Switch room, signs and names. (Target Date 30/04/2024)

(Recommendation 21) Switch room rubber mats. (Target Date 30/04/2024)

(Recommendation 24) Temporary Generator connection. (Target Date 30/04/2024)

(Recommendation 25) UPS system training. (Target Date 24/05/2024)

Action plan BGH

(Recommendation 6) Emergency Plans in Operational Procedure Manual. (Target Date 04/12/2024)

Action plan WGH

(Recommendation 6) Emergency Plans in Operational Procedure Manual. (Target Date 04/12/2024)

(Recommendation 8) Site Schematics. (Target Date 20/07/2024)

Recommendation 15) Security of electrical infrastructure. (Currently working on a solution with the AE)

Action plan HB wide

(Recommendation 1) Minimum of three authorised persons. (Discussed with the AE that we do not have the resource required to achieve 3 AP's)

(Recommendation 3) Secure switch rooms. (Currently working on a solution with the AE)

(Recommendation 4) Electrical schematics. (Target Date 20/07/2024)

(Recommendation 7) Plug in generator. (Target Date 30/04/2024)

In conclusion, this report acknowledges the overdue actions within the HB and attributes their delays to operational pressures, financial constraints & aging infrastructure constraints. By reassessing each action, the aim is to mitigate any risks associated with their overdue status. In addition to the AE audits and recommendations it is acknowledged that the HB has an ageing electrical infrastructure and the HB is tracking this through backlog maintenance requests and risk registers.

Appendix A – List of Regulation Titles within the EAWR 1989.

HSR25 – helps duty holder to meet the requirements of the Electricity at Work Act 1989.

Regulation 1 to 33

Reg 1: Citation and commencement

Reg 2: Interpretation

Reg 3: Persons on whom the duties are imposed by these regulations
 Reg 4: Systems, work activities and protective equipment
 Reg 5: Strength and capability of electrical equipment
 Reg 6: Adverse or hazardous environments
 Reg 7: Insulation protection and placing of conductors
 Reg 8: Earthing and other suitable precautions
 Reg 9: Integrity of referenced conductors.
 Reg 10: Connections
 Reg 11: Means for protecting from excess of current
 Reg 12: Means for cutting off the supply and for isolation
 Reg 13: Precautions for work on equipment made dead
 Reg 14: Work on or near live conductors
 Reg 15: Working space access and lighting
 Reg 16: Persons to be competent to prevent danger and injury
 Reg 17-28: Revoked by the mines regulations 2014
 Reg 29: Defence
 Reg 30: Exemption Certificates.
 Reg 31: Extension outside the Great Britain
 Reg 32: Disapplication of duties
 Reg 33: Revocations and modifications.

WHTM 06-01 Electricity services supply and distribution systems 2018
 WHTM 06-02 Electricity safety guidance for low voltage systems 2006 is the principal guidance to assist duty holders to meet the requirements of the Electricity at Work Act. 1989.
 And subsequent relevant British Standards such as BS 7671:2018 18th edition

Argymhelliad / Recommendation

The Committee is asked to:

- Take assurance from the work being undertaken to ensure compliance with ‘Electricity at Work Regulations 1989’.

Amcanion: (rhaid cwblhau)	
Objectives: (must be completed)	
Committee ToR Reference: Cyfeirnod Cylch Gorchwyl y Pwyllgor:	2.1 Provide assurance around the UHB arrangements for ensuring the health, safety, welfare and security of all employees and of those who may be affected by work-related activities, such as patients, members of the public, volunteers, contractors etc.
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	1105, 502
Galluogwyr Ansawdd: Enablers of Quality: Quality and Engagement Act (sharepoint.com)	Not Applicable

Parthau Ansawdd: Domains of Quality Quality and Engagement Act (sharepoint.com)	2.1 Managing Risk and Promoting Health and Safety
Amcanion Strategol y BIP: UHB Strategic Objectives:	3. Striving to deliver and develop excellent services
Amcanion Cynllunio Planning Objectives	2a Staff health and wellbeing
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2021-2022	2. Develop a skilled and flexible workforce to meet the changing needs of the modern NHS

**Gwybodaeth Ychwanegol:
Further Information:**

Ar sail tystiolaeth: Evidence Base:	Contained within the body of the report. Estates Audit and Inspection Tracker_
Rhestr Termiau: Glossary of Terms:	AE Authorising Engineers AP Authorised Persons CP Competent Persons DP Designated Persons HB Health Board HDUHB Hywel Dda University Health Board HSE Health and Safety Executive HSG Health and Safety Guidance HTM Health Technical Memorandum LV Low Voltage WHTM Welsh Health Technical Memorandum Contained within the body of the report.
Partion / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Ansawdd Iechyd a Diogelwch: Parties / Committees consulted prior to Health and Safety Committee:	Actions form part of the ESG or HB's Electricity Safety Group.

**Effaith: (rhaid cwblhau)
Impact: (must be completed)**

Ariannol / Gwerth am Arian: Financial / Service:	There may be financial implications if the issues identified require monetary rectification.
Ansawdd / Gofal Claf: Quality / Patient Care:	There is a positive impact on staff safety, health and wellbeing through compliance.

Gweithlu: Workforce:	Potential for adverse future staffing impacts if this legislation is not complied with as it relates to employee safety
Risg: Risk:	Risk to health and safety management
Cyfreithiol: Legal:	Potential for enforcement action including Improvement Notices/prosecutions and claims due to breaches in legislation.
Enw Da: Reputational:	Potential for enforcement action including Improvement Notices/prosecutions and claims due to breaches in legislation.
Gyfrinachedd: Privacy:	Not Applicable
Cydraddoldeb: Equality:	Has EqIA screening been undertaken? Yes as part of HB Electricity Policy.