



Wave Hub Electrical Development Engineer Recruitment Information Pack

Introduction

This is an exciting opportunity to join the Wave Hub team who are responsible for managing the world's largest and most technologically advanced facility for pre-commercial demonstration of offshore renewable energy technology. Wave Hub Limited is seeking a highly motivated and competent Electrical Engineer, ideally with experience in the offshore renewables industry. The role offers a diverse and interesting remit encompassing renewables technology development, R&D project delivery and asset management.

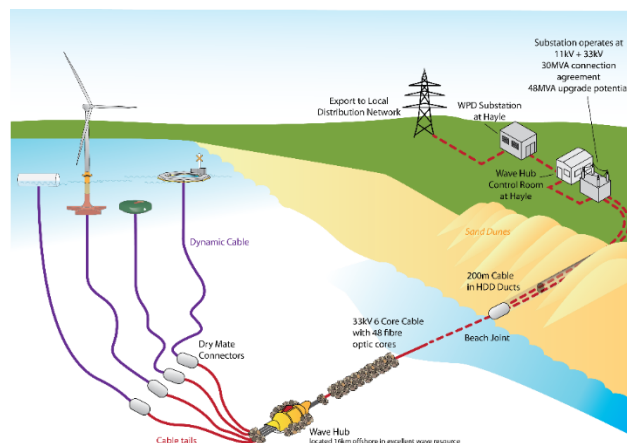
Wave Hub Limited

Wave Hub Limited (WHL) is a research organisation that is currently owned by Cornwall Council. WHL's main responsibilities are to manage, operate and maintain the purpose built Wave Hub demonstration facility in Cornwall and to develop the Pembrokeshire Demonstration Zone in Wales. The company's objectives are to:

- 1) Ensure safe and efficient operations at the two demonstration sites that meet customers' needs.
- 2) Progress technology development by enabling connection and testing of offshore renewable energy installations.
- 3) Engage in research and innovation to help overcome the final hurdles to full commercialisation.
- 4) Foster a growing offshore renewable energy industry in the regions WVE is active in and stimulate associated community benefits.

Wave Hub

Wave Hub is the world's largest offshore deployment site for the testing and development of offshore renewable energy technology. It comprises an onshore substation in Hayle and a 25 kilometre subsea cable that connects a site located 16 kilometres off the north Cornwall coast to the local grid network. Wave Hub is a £35 million asset owned by Cornwall Council and funded by the European ERDF Convergence Programme and UK Government.



Profile Description - Responsibilities

The Wave Hub Electrical Development Engineer is responsible for the management of all electrical services and assets at Wave Hub. This includes working with Developers to ensure their electrical systems are appropriately designed and grid-connection operations are undertaken in a safe and efficient manner. Acting as Duty Manager as part of the duty rota is also a key part of the responsibilities, responding to out of hours engineering issues and emergencies.

Duties Comprise

Asset Management

- Day to day responsibility for the management, availability and upkeep of all electrical infrastructure at Wave Hub. This includes but is not limited to the following:
 - Substation building
 - Premises security
 - HV system
 - LV system
 - SCADA system
 - Contingency equipment, strategic spares and consumables
 - VHF coast-station radio
 - Fire alarm
 - Intruder alarm and CCTV
 - Metering
 - IT systems and fibre optic interface
- Procurement, management and budget responsibility for all electrical support contracts relating to operation and maintenance of the electrical infrastructure at Wave Hub.
- Identify, develop and manage any asset improvement or maintenance projects identified as necessary to ensure the highest standards and levels of availability and to meet or enhance the technical offer at Wave Hub.
- Manage compliance with the DNO Connection Agreement, liaising regularly with Western Power Distribution.
- Manage the Wave Hub Electrical Safety System, ensuring there are safe and effective operational procedures in place which are regularly reviewed and updated considering operational experience, legal requirements and best practice, and which comply with HSE legislation.
- Responsible for coordination of onshore electrical switching and testing as required in support of marine contractors and Developers.
- Maintain the asset register for all Wave Hub electrical infrastructure.
- Provide regular electrical asset condition, operations safety and budget reporting.
- Maintain a complete set of as built record drawings, maintenance records, safety documentation and equipment operation and maintenance manuals.
- Support compliance with any applicable consents or licences.

Operations Support

- Provide electrical engineering design expertise to assist Developers seeking to deploy at Wave Hub and manage all aspects relating to electrical connection to Wave Hub.

- Review Developer Electrical Connection and Test Plans and device design details to ensure all planned deployments are in accordance with good industry practice, relevant legislation and the Wave Hub Electrical Safety System.
- Confirm compliance with the Wave Hub Connection Specification through close liaison with Developers during the design, build and operation of their devices to ensure successful grid connection.
- Undertake witnessing of compliance testing, audits and inspections of Developers' devices in accordance with the Wave Hub Electrical Safety System.
- Provide ad-hoc electrical technical support to Developers.
- Work with Developers to solve electrical, SCADA and IT related operational issues.
- Responsible for implementing an appropriate SCADA alarm schedule, developing the Duty Manager electrical emergency procedures and associated contingency plans.
- Day to day operational health and safety duties including coordinating planned electrical operations and maintenance activity with marine operations.
- Assist in the planning and execution of Wave Hub Limited projects, including technical electrical engineering design and project management support.
- Participate in the Duty Manager rota system implemented to cover out of hours issues and emergencies (approximately 1 week in 5).

Professional Qualifications, Skills and Experience

Required Qualifications

- Degree in electrical engineering with a minimum 3 years of relevant experience (HV systems design, development or operation and management preferably in the renewable energy, electricity supply or offshore sectors)
- Full UK Driving Licence

Desirable Qualifications

- Qualified or recently completed an approved Authorised Person training course (within the last three years) for work on 11kV or 33kV systems.
- Completed a training course in First Aid in the Workplace, in accordance with the Health and Safety (First Aid) Regulations 1981.
- Chartered Engineer and member of a relevant professional organisation e.g. Institute of Engineering and Technology or Energy Institute
- Offshore qualifications: Personal Sea Survival Techniques Training / Offshore Medical / Marine Radio Short Range Certificate

Skills and Experience

- Professional electrical engineer with relevant technical project design, development or operating experience of 11kV or 33kV systems. The candidate must be able to optimise the system architecture and operating processes.
- Good understanding and knowledge of Electrical Safety Guidance for HV systems, such as The Energy Networks Association Model Distribution and Safety Rules.
- Electricity generator project experience and compliance with a grid connection agreement – preferably for an offshore renewable energy project.
- Experience of operating a SCADA system.
- Excellent contractor management skills with a strong track record of managing projects, contracts and services safely and to budget.

- Excellent report writing and IT skills in MS Office essential and preferably also CAD.
- Good team worker with initiative, integrity and excellent communication skills and track record in building strong relationships with external stakeholders.
- Establishing a proactive can-do attitude and solution focused technical approach in all projects and activities.
- Committed to training towards certification as an Authorised Person on the Wave Hub HV system.
- Respond in a calm and pragmatic manner when under pressure and in response to emergencies.
- Committed to the renewable energy industry and reduction of carbon emissions.
- Content to accept periods of lone working without close supervision.
- Fluent in English and willing to travel for business and represent Wave Hub Ltd at conferences/events/meetings (up to one week at a time).

Salary and Benefits: A competitive salary is available for this role, depending upon the skills and experience of the preferred candidate. In addition, a benefits package is available including 25 days annual leave and a 6% employer contribution to an agreed pension scheme.

Reports to: Head of Engineering and Operations

Location: This is a full time position based at Wave Hub Limited's office in Hayle, Cornwall.

How to Apply

Applicants should submit an up to date CV together with a covering letter explaining why you are interested in the role, what relevant experience you have to take on the responsibilities and how you satisfy the person specification. You should also provide information of your current salary and benefits and a completed monitoring form. The names and addresses of two people that will act as your referees should also be provided, one of which should be a business/professional contact. We will only approach them if you are invited to interview.

Applications should be sent to Wave Hub Limited, Chi Gallos, Hayle Marine Renewables Business Park, North Quay, Hayle, Cornwall TR27 4DD or emailed to enquiries@wavehub.co.uk by 4pm on 27 October 2017.

Interviews will be held in Hayle on 9/10 November 2017.

Further Information

Further information about Wave Hub Limited is available at our website www.wavehub.co.uk

To have a confidential discussion about the role please call Julius Besterman on 01736 800291.