

**THE EUROPEAN MARINE ENERGY CENTRE**  
**JOB DESCRIPTION AND PERSON SPECIFICATION**  
**ELECTRICAL ENGINEER**

**Reports to:** Operations and Maintenance Manager

**Purpose:** Assistance in management of EMEC HV and LV systems including client's electrical connections and marine energy device performance testing.

**Responsibilities:**

1. Responsible for the electrical design and construction work for EMEC's electrical systems including management of defined work packages and client projects, along with required operational activities at the marine energy test sites.
2. Develop electrical testing requirements and methodology for marine energy technologies.
3. Interface with the client and ensure prompt attention and resolution of problems identified during testing.
4. Supervision of and assistance with commissioning of new plant and maintaining EMEC electrical systems.
5. Develop, maintain, and update test software and equipment which is used to gather data at EMEC's test sites and abroad.
6. Analyse and interpret test results, identifying potentially suboptimal technology performance and data errors, and prepare technical reports containing quality and reliable data for use by the client.
7. Deliver tasks associated with the acquisition of EMEC and developer specific performance data. Assist with the maintenance and development of EMEC's SCADA system.
8. Maintain awareness of and adherence to HSE procedures and good practice as defined in the Integrated Management System (IMS). Prepare method statements and safe work practice documentation for approval by the Operations Management Team.
9. Ensure that the EMEC Integrated Management System is adhered to and assist the Quality Manager and others with identifying and progressing improvement actions, supporting EMEC's accreditation by the UK Accreditation Service (UKAS) or other relevant body.
10. From time to time carry out other assignments which may differ from the above as instructed by the Operations and Maintenance Manager.
11. Work closely and flexibly with all EMEC staff from across the business.

**Reports:** There are no direct reports to this position, but the incumbent will be required to direct and supervise sub-contractor personnel who carry out certain functions for EMEC.

## **Person Specification**

### **Education:**

Essential – Degree in electrical and / or electronic engineering (or similar). Willingness to undertake additional training and career development.

Desirable – Recognised further electrical industry qualification or accreditation.

### **Skills & Knowledge:**

Essential – Good numeracy and written and verbal communication skills, familiarity with HV electrical operations, computer literate, familiar with IT and measurement systems.

Desirable – Experience in preparation of electrical design documentation, knowledge of protection, metering, or instrumentation hardware systems, understanding of grid compliance issues, equipment performance testing experience, experience working within QA systems such as the ISO 9000 series.

### **Personal Attributes:**

Essential – Team worker, self-motivated, high sense of responsibility and integrity, personal aptitude for outdoor life and liking for marine activities. Able to work on own initiative, including some periods of lone working without close supervision.

### **Experience**

Essential – 3 to 5 years post-qualification experience within the electrical power industry or similar.

### **Special Conditions Associated with the Role:**

1. The role involves working at various locations primarily throughout Orkney but may involve travel elsewhere on occasion.
2. The role may involve working outdoors and at sea.