

JOB DESCRIPTION

POST TITLE	Senior Power Supply Engineer		
DIVISION/DEPARTMENT	Technical Division, Power Supply Group		
REPORTS TO	Head of Power Supplies Group	GRADE	4

AIM

As a member of the Power Supply Group, support the operation of all magnet power supplies, magnets, and associated cabling, striving for a high degree of operational reliability. Lead the design, development, commissioning and operation of any new power supplies required for the accelerators or beamlines.

ACCOUNTABILITIES

- Provide a high level of technical knowledge and practical experience of high stability power supply technology, covering DC, AC and pulsed systems and their control interfaces.
- Support the operation of the power supplies, including being part of the 24 hour on-call team, and carrying out power supply troubleshooting and repair where necessary. Investigate beam trips attributable to the power supplies and strive to minimise the number of trips and repair time.
- Manage regular monitoring, testing and preventative maintenance of the power supplies, in order to minimise down time, and ensure stable, reproducible operation.
- Manage the development of test and maintenance procedures and ensuring adequate spares levels are maintained for the power supplies.
- Manage safety aspects of work related to the operation of the magnet power supplies, the cabling and magnet loads, including the preparation of safety documentation, such as Risk Assessment, Method Statements and procedures.
- Maintain up to date documentation.
- Lead the development of new power modules and electronic circuits as part of the continuous improvement programme for the power supplies.
- Lead the design and manage production of any new power supplies required for the accelerators or beamlines.
- Manage new power supply projects, including interfacing with internal customers, engineers and scientists, to develop requirements, propose solutions, manage expenditure and track project progress.
- Provide advice on Electro-Magnetic Compatibility (EMC) issues within the Power Supply Group and to other groups, arrange EMC testing of power supplies and other equipment as appropriate.
- Maintain and develop technical expertise in power supply technology and control.

Because of the changing nature of our business your job description will inevitably change. You will, from time to time, be required to undertake other activities of a similar nature that fall within your capabilities as directed by management.