

JOB DESCRIPTION – ELECTRICAL DESIGN ENGINEER

Job Title	Electrical Design Engineer
Date Reviewed	August 2021
Responsible To	Sales Director
Responsible For	None
Location	UK (Home Based, with regular travel to London office)

Business Profile

AVK are the UK's leading provider of critical power systems and maintenance that guarantee reliable power. For 31 years we've been supplying UPS systems, standby diesel generators and more recently Battery Storage and Gas Generation solutions providing our clients with reliable back-up power schemes for their mission critical services & systems.

We are trusted by many of the UK's largest Data Centre operators, Finance & Banking providers and Telecommunications companies to design, install and maintain 100% power integrity by providing diesel/gas generators, uninterruptible power systems, battery storage, switchgear, protection relays and turnkey solutions.

AVK specialise in all aspects of the design, planning, implementation and on-going maintenance of critical power systems. We provide solutions for standard or large scale bespoke applications, covering all project sizes from £1k up to £30m. Our extensive and growing client base reflects our highly regarded reputation for both quality and service.

Overview

AVK has an exciting opportunity for an experienced **Electrical Design Engineer** to join our team. AVK is a leading provider of on-site distributed energy solutions and are looking for an enthusiastic and adaptive individual to join our quickly growing business.

This is a varied role supporting delivery of our growing portfolio of projects including Power Generation (peaking, prime, behind and front of meter and CHP gas-power generation). The successful candidate will be responsible for Electrical design from initial concept, through detailed design, installation to commissioning and handover.

The role requires the ability to produce electrical engineering deliverables on assigned projects. A background in distributed generation, CHP, gas power stations (20Mwe to 170Mwe) or a related field would be highly desired. Applicants should be able to demonstrate a detailed understanding of a broad range of technologies (generators, transformers, switchgear, cables, earthing, controls & instrumentation).

Responsibilities

	Develop solution design as per client requirement.
	Preparing Electrical calculations, design and equipment specifications
	Co-ordinate design input from mechanical engineers
	Detailed design of LV/HV solutions.
	Develop control philosophy and design for plant operation with client infrastructure and grid requirements with an understanding of grid requirements
	Preparing electrical calculations and equipment specifications
	Design of control panels for generators and auxiliaries, and integration with the client's control system
	Detailed design of LV electrical solutions and specification of HV works
	Design of earthing and protection systems for power generating equipment
	Preparing new and modifying existing drawings including panel schematics, SLDs, BCDs and cable schedules
	Defining the scope of work and interfaces for subcontract packages
	Support the management of all HSE, technical and compliance risks associated with projects
	Develop testing and witnessing plans for handover
	Support project delivery taking responsibility for tendering and delivery of key installation packages

Person specification

Key skills and knowledge	Desired/Essential
Degree in Electrical Engineering	Essential
Experience in design of electrical/control systems for industrial and commercial customers	Essential
Knowledge of legislation, standards, safe working practices, and environmental best practice	Essential
Knowledge of machinery safety, electrical systems, BMS or metering would be an advantage but not essential	Desired
Support the management of all HSE, technical and compliance risks associated with electrical systems	Essential
Sound written and presentation skills as well as excellent general communications skills	Essential
Hold a full valid driving licence	Essential