Role definition

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| Job title: | Senior Secondary Engineer - HV |
| Reports to: | Office Lead, Power  |
| Direct reports: | CAD Technician & Engineer |
| Business unit: | Baker Hicks Limited | Location: | London, Warwick or Derby |

Summary

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| Baker Hicks have grown rapidly in the Transmission & Distribution sector over the last six years and have been successful in winning a number of major projects within the UK. As the demand to deliver exceptional engineering design from our clients continues to grow, an opportunity has arisen for a Senior Secondary Electrical Engineer.  |

Key objectives

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| The Senior Secondary Electrical Engineer – HV role will be reporting to the Office Lead and will be responsible for ensuring the quality and consistency of the team’s output in the production and control of drawings and technical documents. You will also work with the Sector Director - Power to assist during the bid process in order to secure further work.  |

Principal responsibilities and accountabilities

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| The candidate must have experience (depending on role) in the production of all designs, calculations, reports & drawings associated with the new or modification of EHV projects from 11kV to 400kV, covering power system studies, and secondary design (e.g. protection & control).The candidate must have a reasonable level of maths and science, preferably from a power engineering background and have good communication skills. In the role they will manage the production through a robust checking process but must also develop drawing office standards, mentor and train the CAD technicians and, when work dictates, support the actual delivery of the outputs.The candidate must be enthusiastic, mature enough to operate in a diverse team and work without full time supervision. This role can lead to many of the career paths for the employee as they develop through BakerHicks. |

Person specification

Qualifications and training

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| * Minimum BEng/Bsc in Electrical Engineering, ideally MEng/MSc in Electrical Engineering.
* Working toward CEng status, however not essential.
* Ideally working toward TP141 authorisation by National Grid, however not essential.
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Technical skills and experience

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| * Guiding junior and other engineers
* The candidate shall be proficient in either one of the following areas:
1. Power System Studies:

 Delivering power system studies, including but not limited to:* + Modelling of power system networks.
	+ Load flow studies
	+ Short circuit studies
	+ Motor starting studies
	+ Earthing studies
	+ Protection discrimination studies
	+ Calculations and technical reports
1. Secondary and P&C Design:

 Delivering secondary design requirements, including but not limited to:* + Secondary layouts for substation
	+ First main protection
	+ Second main protection
	+ Backup protection
	+ Overall protection
	+ Busbar protection
	+ DAR lockout – cable unit protection
	+ Site electrical interlocking calculations
	+ CT sizing calculations
	+ Writing technical specifications for procurement
	+ Calculations and technical reports
* Preparation, checking and/or approval of feasibility studies, outline and detailed design technical reports and other written documents.
* Design, checking and approval of detail allocation and construction design drawings.
* Production and approval of design concepts, drawings, specifications and other technical documents.
* Management of teams of engineers and external suppliers.
* Delivery of work to programme, budget and specification.
* Take part in Design & HAZID (hazard identification) reviews as appropriate.
* The adherence to and control of documents and drawings in accordance with BakerHicks management procedures.
* Design input/output within the designated risk management process.
* Development of team specific standards to ensure the consistency of the output.
* Development of the team CAD technicians.
* Accept ownership of work to be done (i.e. being required to undertake specific actions within an agreed job boundary, the execution of a delegated task, activity or process).
* Providing programme updates to the Lead Engineers for the duration of the project life.
* Highlighting any quality and delivery risks.
* Provide a technical interface with 3rd parties
* Understanding of IEC standards
* Experience in software packages such as IPSA, ETAP, PSS/E, DigSilent, ERACS, CDEGS, COMSOL etc.
* Experience in guiding CAD technicians working in packages such as Microstation, Revit, AutoCAD, etc.
* Be proficient with associated technical specifications from clients such as National Grid, SSE, Scottish Power, UKPN, WPD, NPg, ENWL, etc.
* Good computer and report writing skills.
* Good interpersonal skills and the ability to work well within a team.
* Good attitude to obtaining new skills and capable at transferring existing skills to overcome new challenges
* Must be competent at creating and laying out quality drawings that contractors, suppliers and fabricators can understand.
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