**Green Cat Renewables Job Advertisement – Senior Electrical Design Engineer**

Location: Edinburgh or Glasgow

**The Company**

Green Cat Renewables (GCR) is a dynamic, innovative company that provides the complete range of technical services required to deliver renewable energy projects. The team of over 90 Engineers and Environmental Consultants deliver projects on behalf of clients from four offices in Edinburgh, Glasgow, Livingston and Biggar. GCR also works closely with its three sister companies Green Cat Hydrogen and Green Cat Contracting based in the UK and Green Cat Renewables Canada based in Calgary and Halifax.

Through the Engineering Department, the company provides Engineering Consultancy and Project Management services to Clients on wind, solar, BESS, hydrogen and hybrid projects. This includes full electrical design and management including on-site, grid (distribution and transmission level), and ICP works.

Green Cat Renewables requires a Senior Electrical Design Engineer to join the Engineering Team in Edinburgh or Glasgow.

**The Role:**

The Senior Electrical Design Engineer will work on all facets relating to the electrical engineering works of renewable energy projects through all phases of renewable energy development, from the project feasibility stage, through detailed design, through construction, and the completion of testing/commissioning. They will work with engineering professionals and project managers to provide technical electrical engineering support as an Owner’s Engineer. They will apply engineering knowledge and professional judgement acquired through experience to fulfil this role, in accordance with codes, standards, and best practice. Direct experience relating to project construction is considered an asset. They will also work with engineers, draftsmen, and designers to review various scopes such as engineering work packages, grid applications, and power system studies. There will be a specific focus on the electrical design elements of the growing number of green hydrogen projects currently under way within the business.

Occasionally, they may be required to support other disciplines with technical and non-technical aspects of the business, that may not be particularly focused on electrical design and could include, but not be limited to: report and proposal writing and resource monitoring/assessment.

* Act as a technical electrical engineering resource for all areas of renewable project development.
* Conduct technical reviews of electrical engineering deliverables provided by internal and external parties.
* Conduct and/or oversee construction phase services, inclusive of responding to RFI’s, issuing site instructions, reviewing CAD drawings, and completing site assessments.
* Act as the Senior Electrical Design Engineer for engineering work packages, inclusive of project equipment layouts, SLDs, cable schedules, wiring diagrams, grounding layouts, panel schedule, load lists, etc.
* Act as the Senior Electrical Design Engineer for the required power system studies, inclusive of Power Flow Study, Short Circuit Analysis, Harmonic Analysis, Flicker Study, Rapid Voltage Change, Effective Grounding Study, Insulation Coordination, Cable Ampacity Analysis, Grounding System Study, Concentric Neutral Sizing, Protection Coordination/Setting, and Arc Flash Analysis.
* Manage and/or oversee multiple projects, inclusive of electrical scope, budget, schedule, and resourcing.
* Manage and/or lead meetings between internal professionals, owners, contractors, external consultants, and utilities.
* Mentor junior engineers, designers / drafters, professionals.
* Prepare electrical engineering proposals in response to developer and utility requests for proposals.
* Attend networking events, client meetings and support business growth opportunities as required.
* Support internal reporting and project tracking efforts.
* Undertake design work and design reviews on all types of renewable generator and green hydrogen projects
* Carry out active problem solving with various project stakeholders (Clients, Network Operators, technology suppliers’, contractors) to manage and mitigate renewable projects’ electrical elements.
* Provide electrical input (reviewing and approving) and managing Balance of Plant Contractors, ICP and Suppliers, including associated Agreements and Contracts.
* Prepare and review of electrical scopes of work and specifications for tendering.

**The Candidate:**

*Essential*

* Minimum BEng or equivalent degree in Electrical Engineering.
* 5+ years’ experience working in the renewable and/or power generation industry, knowledge of inverter-based generation
* Ability to evaluate suppliers’ bids and contractors’ proposals technically and commercially.
* Strong understanding of all phases of project development, specifically of construction of energy generation projects
* Experience in electrical engineering of LV distribution, and HV power systems
* Experience in developing and reviewing:
	+ sizing calculations for electrical equipment
	+ single line, interconnection wiring and schematic diagrams for LV and HV systems
	+ cabling layouts and schedules
* Experience in power generation, grid connection, and grid connection process
* Strong knowledge of the UK Grid Code and ENA G-99/G-100 engineering requirements
* Experience with software-based modelling and simulation in some or all of: ETAP/PSCAD/PSSE/DigSILENT/CDEGS

*Desirable*

* Chartered Electrical Engineer status
* Experience with Transmission & Distribution utility engineering or similar experience
* Experience with SCADA systems and programming
* Knowledge of electrical building design /code
* Capable of innovative solutions and approaches and is open-minded to alternative solutions
* Knowledge of ATEX requirements for industrial process environments
* Knowledge of instrumentation and control systems
* MCC distribution system design

**Benefits:**

* Competitive salary
* 25 Days annual leave and 8 flexible bank holidays
* Private Medical Healthcare
* Cycle to work scheme
* Professional development opportunities and support
* Professional fees paid for by the company
* Company social events and team building days
* On-site parking with EV charging points available to staff

To apply please send a full CV and covering letter to jobs@greencatrenewables.co.uk .