

# Electrical Engineer – Arcola Energy

March 2014



## Application Pack for the post of Electrical Engineer

Thank you for requesting information about this role at Arcola Energy.

In this pack, you will find the job description and person specification for this post together with an application form and Equal Opportunities monitoring form.

To apply please complete the application form fully and email it to [jobs@arcolaenergy.com](mailto:jobs@arcolaenergy.com) (placing ELECTRICAL ENGINEER in the subject line).

Please note that only applications submitted on the Arcola Application Form can be considered.

Please feel free to save and send the Equal Opportunities monitoring form separately from your application form.

Please note that we can only accept applications from people who have a work permit for the UK.

Unfortunately, as we have limited resources, we are only able to respond to shortlisted applicants so if you have not heard from us by 4<sup>th</sup> April, your application has been unsuccessful.

- The deadline for applications is 5pm on Wednesday 2<sup>nd</sup> April 2014
- Interviews: w/c 7<sup>th</sup> April 2014

## About Arcola Energy

Arcola Energy is a rapidly growing fuel cell systems company - designing, integrating and deploying a range of low-carbon energy solutions. Arcola Energy is active in a wide range of fuel cell application markets including education, portable power, transport and stationary.

We are also the National Representatives and lead European Engineering Projects for Horizon Fuel Cell Technologies, the world's largest volume producer of PEM fuel cells up to 1000W.

We carry out a wide range of activities, from designing and developing fuel cell systems, sales of our own products and educational activities at schools, public events and universities. Alongside our sister company, Arcola Theatre, we have a strong environmental ethos and are driven by the desire to make the world a better place.

We need an experienced, enthusiastic Electrical Engineer to assist in the development of new products, and to provide engineering support over a broad range of activities.

For more information about our products, services and current projects, please check our website: [www.arcolaenergy.com](http://www.arcolaenergy.com)

## Job Description

### Purpose

To form a part of Arcola Energy's engineering team, providing input throughout the process of developing and bringing new fuel cell based products to market, as well as supporting new and existing customers.

### Outline

You will be joining a rapidly growing company, working at a fast pace across several exciting projects. The ability to manage your time is essential, as is a can-do attitude and willingness to engage in new challenges.

### Organisation

Reporting to: Lead Engineer

### Principal accountabilities and tasks include:

#### System/Hardware Development

- System design: Specify components, balance of plant and hybridisation architecture to meet product requirements.
- Circuit design: schematic, PCB layout, design for manufacture
- Component selection and compile Bills of Materials.

#### Assembly and testing of systems

- Build and test systems (v.low volume) to meet demand, and run bench-testing, ensuring required quality standards are met.

#### Quality, Systems and Compliance

- Work within Arcola's APQP framework.
- FMEA and DFMEA
- Compile technical files for products, conducting in house testing and commissioning external testing (eg EMC) where appropriate.
- Working towards compliance with appropriate standards.

#### Engineering Project Support

- Develop proposed solutions to meet client enquiries, and carry out any necessary follow-up.
- Industry research/project proposals e.g. for funding applications.
- Site visits to support deployed systems.

#### General

- Be knowledgeable about the full range of Arcola Energy work
- Represent Arcola Energy in a professional manner
- Work with Arcola Energy staff to deliver the best possible outcomes for the organisation
- Assist as necessary in other short-term technical issues that may arise (eg I.T. within office).
- Take on projects as requested by the Lead Engineer and other senior managers

## Person Specification

### Essential:

- You have a degree or higher in Electrical or a related Engineering discipline.
- You have at least 3 years experience in industry.
- You are experienced in circuit design at a schematic and PCB layout level, and implement best practice working towards certified products.

- You have practical experience in building and testing prototype systems in the lab.
- You have excellent written and oral communication skills.
- You have a high level of interpersonal skills and can work effectively with others.
- You are an efficient, organised person – not afraid to ask for a steer in a situation, but also able to suggest what you think should be done.

**Preferable:**

- You have some understanding of hydrogen fuel cells and some experience or knowledge of automotive systems (particularly electric vehicles).
- You have some experience of safe handling of high pressure gases.
- You have experience of computational modelling (e.g. Simulink).
- You are experienced in writing and supporting C/C++ code for embedded systems.
- You have experience or knowledge of design for manufacture, working within a project-model framework and quality systems such as APQP.
- You have an interest in renewable energy, sustainability and making the world a better place.

**Terms and Conditions**

<b>Salary:</b>	£26-35,000 dependent on experience
<b>Hours:</b>	10am - 6pm Monday to Friday, occasional evening and weekend working (TOIL system in operation)
<b>Holidays:</b>	28 days annual leave, including public holidays
<b>Probation period:</b>	3 months
<b>Access:</b>	Arcola Energy is wheelchair accessible throughout
<b>Benefits:</b>	Free tickets to Arcola Theatre shows (subject to availability) Arcola staff discount on all food and drink