Functional Safety Engineer – Arcola Energy Ltd.

Arcola Energy, a Ballard Power Systems company, is one of the fastest growing hydrogen technology companies in the UK, working with some of the most progressive local authorities, fleet operators and OEMs to meet their zero-emission targets. Arcola has more than 10 years of experience in delivering solutions that address the deployment gap between rapidly evolving low-carbon technologies and production-ready solutions.



Position: Functional Safety Engineer Reports to: Lead Systems Engineer

Location: Dundee/flexible - the job holder will support a project based between London and

Dundee as well as other international opportunities. Arcola Energy is currently

working from home.

Job Description

You will be part of the Systems Engineering team, responsible for ensuring compliance of Arcola's hydrogen propulsion vehicle systems to the ISO 26262 standard. Starting with a safety plan you will collaborate with the systems, electrical, control software and test and validation teams to develop vehicle hazard and risk analyses, safety goals, functional and technical safety requirements as well as ensuring robust verification and validation aligned with the systems engineering V.

Primary responsibilities:

- Develop Arcola's product development model processes to support functional safety activities
- Create functional safety goals and cascade requirements in adherence to ISO 26262 for one of Arcola's vehicle products
- Develop safety related documentation including safety plan, safety case, item definitions, HARAs, FTAs, DFMEAs and similar
- Ensure all safety related requirements are defined, complete and traceable through to verification and validation
- Project manage implementation of functional safety work products
- Support other engineers in safety related activities including delivering training as required
- Work with independent consultant to audit and ensure functional safety compliance
- Supporting other Arcola Energy activities where required.
- The position is home-based, with frequent site visits to Arcola facilities in Scotland and customer sites/test facilities as required.

Experience and competencies:

- Degree in engineering or related discipline
- Working knowledge of the Systems Engineering V-model
- Significant knowledge and experience of ISO 26262 and other relevant standards preferably within an automotive OEM or Tier 1 supplier
- Knowledge and experience of failure mode avoidance processes including DFMEAs and Fault Tree Analysis throughout the product engineering lifecycle, from concept to production
- Experience in using requirements management systems such as DOORS or similar
- Experience in developing and working to a Design Verification Plan
- Desirable: experience in software quality and process e.g. ASPICE
- Desirable: experience in using Matlab and Simulink
- A good understanding of electric drivetrain architectures and familiarity with different types of components such as batteries, motors, power electronics

- Good data presentation skills (reporting and documentation)
- Well organised, comfortable following process and excellent attention to detail
- Excellent communication skills
- Willingness to work cross-functionally in the Arcola team.

What you'll receive in return:

- Competitive salary, based on experience
- Support towards CEng accreditation and your membership fees paid for IET/IMechE
- Flexible work arrangements we are currently working from home
- An opportunity to directly impact projects from concept through to production
- Free tickets to the Arcola Theatre (subject to availability), and Arcola staff discount on food and drink in café/bar.

About Arcola:

Arcola Energy delivers solutions that significantly improve environmental performance compared to incumbent technologies, contributing to the development of cleaner, greener, more secure, more democratic energy and transport systems, enabling healthier living for everyone.

We are committed to fostering a diverse work environment and are proud to be an equal opportunity employer. As we highly value diversity in our current and future team, we do not discriminate on the basis of race, religion, colour, national origin, gender or gender expression, sexual orientation, age, marital status, disability or any other characteristic protected by law.

To apply, email: jobs@arcolaenergy.com