Job Description

NUC-NUCLEAR SAFETY SOFTWARE QUALIFICATION ENGINEER [TRA00001120]

Tractebel

ENGIE is a global energy company, a leading provider of electricity, natural gas, and energy services. With 153,090 employees in more than 70 countries worldwide, ENGIE achieved revenue of €66.6 billion in 2016. ENGIE is committed to being a leader in the energy transition.

We are looking for talented and motivated people to create the future of energy. Join a rewarding and flexible work environment that encourages innovation and creativity, and help us meet the energy challenges of today and tomorrow.

At the helm of the Energy Transition, TRACTEBEL provides a full range of services throughout the life cycle of its clients’ projects. As one of the world’s largest engineering consultancy companies and with more than 150 years of experience, we are able to offer our customers multidisciplinary solutions in energy, water and infrastructure. Our broad range of expertise extends across Europe, Africa, Asia, Middle East and Latin America, allowing us to rise to our clients’ most demanding challenges with the same high-quality engineering and consulting services no matter where their projects are.

The Nuclear Entity of Tractebel seeks for its Electrical Instrumentation & Control (EI&C) Department a (m/f):

**Nuclear Safety Software Qualification Engineer**

The working environment

Tractebel is a global engineering consultancy company with
more than 100 years of expertise in energy and infrastructure projects. Tractebel’s services cover the whole lifecycle of these projects, from feasibility studies to decommissioning. Our unique solutions bring added value to clients in public as well as private markets all over the globe. Headquartered in Brussels (Belgium), and with offices in twenty countries and projects in over 80, Tractebel Engineering is undeniably a top-level partner for every single of its clients. The EI&C Department is involved in a great number of varying projects related to the studies and the modifications of existing Belgian nuclear power plants (Doel/Tihange) including Long Term Operation (LTO) projects. For the modification projects, these go from the pre-feasibility studies up to final commissioning of the installations, covering feasibility, design, procurement and on-site realization activities. Many replacement systems in the nuclear power plants do now rely on software for their operation. Any malfunction of the software can potentially have an impact on the safety of the plant. It is therefore mandatory to have highly dependable software, which is obtained with a high-quality development process.

Your function

For leading the software qualification of safety related devices in our projects, Tractebel is looking for a Nuclear safety software qualification engineer who will:

- Understand the technical features of various safety devices (from SMART sensors to complicated multi-layered architectures);
- Analyse the behaviour of the devices from a safety point of view (determinism, response time, failures, fail-safeness, defence-in-depth);
- Review the software development process (verification and validation of the software);
- Follow up the software development for a new dedicated application;
- Lead and perform software audits at the Suppliers;
- Demonstrate the suitability of the technical solutions against the requirements of the IEC standards (IEC 60880, 62138, 62566);
• Build the qualification files that demonstrate the suitability of the technical solution, based on the gathered evidences (design documentation, Software tests, tests on target);
• Present the qualification conclusions in front of the safety authority (AFCN, BEL V).

Qualifications

• Master Degree in Electronic (or similar) with the following assets:
  - knowledge in electronics or embedded software: μCPU, FPGA, operating system, ...;
  - knowledge in C code, assembler, VHDL;
  - knowledge of professional software development processes;
  - knowledge in testing software based products.

• An experience of 3 years in aforementioned activities;
• Speaking and writing fluently in English;
• Dynamic, rigorous and creative, autonomous, good at teamwork, assertive and good communicator and listener.

Curious and motivated to learn, the ideal candidate should also have a critical mind, be willing to travel (short duration missions of a few days in Europe), and be fluent in English (spoken and written) as most of the suppliers are located abroad.

What we offer

• An interesting and varied job in an international environment with a good work/life balance;
• A stable work environment where professional growth and development are stimulated (via the Tractebel School and the ENGIE University);
• An attractive compensation package with fringe benefits;
• A permanent contract to ensure the roles offered are in accordance with your skills, interests, career goals and lifestyle.
Please contact recruitment-engineering@tractebel.engie.com for any further information.

Field
: Engineering / Projects
Nature of Responsibility
: Manager / Expert
: 
Schedule
: Full-time
Primary Location
: Europe-Belgium-Brussels-Brussels-Capital Region -
Job Posting
Nov 16, 2017