

SENIOR CONTROLS/PLC ENGINEER HYDROGEN STATIONS

Surrey, BC, Canada

Full Time

Advanced Transportation - Hydrogen

Powertech Labs Inc, BC Hydro's subsidiary that specializes in energy research, consulting, testing, and systems integration, has been serving power utilities, oil and gas companies, automotive, and electrical utility equipment manufacturers since 1989. We operate as a separate, unregulated, for profit, commercial company. In addition to providing innovative R&D, consulting, and testing services to BC Hydro, Powertech provides most of its services to a large and diverse suite of clients across North America, and around the world. Powertech is located on an 11-acre campus in Surrey, British Columbia and has 200+ employees. Our reach and reputation are global, and we are recognized as a leader in technology, testing, and power systems software. Our location places us close to BC Hydro, 25 kilometers from the US border, and at a gateway between Asian and North American markets. Finally, we are located in one of the most desirable locations on the globe, with all the natural beauty of British Columbia on our doorstep. We call this home.

This is your chance to have a global impact on achieving a low carbon future. The hydrogen vehicle industry is rapidly developing and Powertech is at the forefront. We have an exciting opportunity to lead a fun team within Advanced Transportation focused on the manufacture of industry-leading hydrogen vehicle fueling stations. Powertech has already helped put fuel cell vehicles on the road – we need you to help us put the fueling infrastructure in place.

Powertech's Hydrogen Infrastructure group is a technical leader in the design, construction, and operation of compressed hydrogen refueling infrastructure solutions including stations, light-weight tube trailers, and station testing/certification equipment. We pioneered the design of turnkey, containerized hydrogen refueling station packages. Other firsts include the world's first 700 bar "fast-fill" hydrogen fueling station and the first hydrogen station capable of refueling four fuel cell vehicles simultaneously.

The Senior Controls Engineer will be responsible for base programs to be used in new production while optimizing system performance and limiting equipment failures/downtime. By partnering with the engineering, manufacturing, and field service teams the Controls Engineer will develop a thorough understanding of the performance requirements of the system and continually refine controls to enhance system reliability.

- Lead and execute control system design and documentation (control narratives, functional descriptions, logic diagrams, etc) for hydrogen refueling equipment.
- Develop and deploy software solutions for hydrogen systems focused on process control and optimal system performance
- Provide leadership when deploying software solutions for H2 infrastructure to ensure appropriate communication and achievement of deliverables
- Lead and execute PLC and HMI programming to ensure that software and automation solutions are effective and reliable both pre and post deployment

- Actively participate in or lead HAZOP studies.
- Size and specify instrumentation, control valves, and PLC/HMI hardware.
- Lead factory acceptance testing at Powertech.
- Lead field commissioning work, including startup of equipment, diagnosing, and troubleshooting instrumentation and controls issues, hands-on field work
- Oversee and provide technical input and directions to Technicians and electricians involved in the construction and testing of the hydrogen fueling stations.
- Establish quality control and safety of the process and design.
- Maintain professional relationships with other departments, outside consultants, contractors, and suppliers in order to gather and relay information and resolve issues of concern.
- Provide customer support for new and existing hydrogen stations. This may involve remote support or travel to customer sites.
- Exercise a high degree of independent judgment to solve highly complex problems that have an impact across sectors and include customers, technology, financial planning, and staffing.

Qualifications

- A degree in Electrical Engineering from a recognized university.
- Minimum Eight (8) years of direct experience in an industrial controls and programming environment with a strong familiarity in several the following areas:
 - Industrial automation
 - PLC and HMI programming solutions (Allen Bradley / Rockwell)
 - Instrumentation specifications and troubleshooting
 - Preparing technical specifications and control descriptions
 - Hazardous area electrical installations
 - AutoCAD design
 - Proficient with relevant codes and standards (CSA C22.1, NFPA 70, NFPA 79)
 - Working knowledge of IEC standards
 - Expertise in the development of Process and Instrumentation Diagrams (P&IDs) and process controls
 - Hydrogen or other high pressure gas experience is desired

Registration as a Professional Engineer with Engineers and Geoscientists of BC. Canadian, out-of-province registrations are acceptable as long as there is an ability to immediately transfer the accreditation to Engineers and Geoscientists of BC.

FS Eng (TUV Rheinland) designation is considered an asset.

Excellent verbal and written communications skills to adequately articulate and discuss technical options, present proposed solutions to a wide range of audiences, and the ability to adapt to the different understanding levels of the audience

Additional information

- * Must possess the highest ethical standards and role model high standards of professionalism.
- * Uncompromising dedication to safety and a commitment to work quality.

- * Demonstrated analytical abilities and ability to follow-through with various stakeholders.
 - * Superior written and oral communication skills.
 - * Ability to manage complex projects and multi-task effectively.
 - * Experience in leading and/or coordinating cross-functional teams.
 - * Strategic thinker with exceptional analytical skills.
- * Computer and software systems skills as applicable to position including but not limited to: Word, PowerPoint, Excel, Project, and Outlook.

Location: Surrey

Job Grade: P3

Job Status: Full time Regular

* All applicants with lesser qualifications and relevant experience are encouraged to apply and may be considered at the appropriate level.

Please be advised that this role has been assessed as safety sensitive and pre-qualification alcohol and drug testing will be required as a pre-condition to employment.

A condition of employment for this job is that you maintain your Driver's License (Class 5) in good standing.

For Powertech Lab positions, the flexible work model options are different due to their specific operational requirements and details will be discussed at the interview stage

ALL CANDIDATES ARE REQUIRED TO ATTACH A COPY OF THEIR COVER LETTER, RESUME, DIPLOMA/DEGREE, ACADEMIC TRANSCRIPTS & PROOF OF PROFESSIONAL DESIGNATION.

Note that applicants are required to submit/upload a copy of their college transcripts and Diploma as proof of post-secondary graduation. If applicable, a copy of your work visa is also required.

INCOMPLETE OR LATE APPLICATIONS CANNOT BE PROCESSED. This will ensure we have all the necessary information to assess your application without any delays.