

SENIOR ELECTRICAL 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.

As a member of the Hydrogen Stations team, the Senior Electrical Engineer shall work on all aspects of product development including specifications, analyses, testing, and integration of electrical and electromechanical components used in hydrogen infrastructure systems. This position also provides expertise related to system design, electrical assemblies, development of drawings, system troubleshooting, and documentation.

Duties

- Lead and execute electrical and instrumentation design of hydrogen refueling equipment.
- Oversee and provide technical input and directions to technicians and electricians involved in the construction and testing of the hydrogen fueling stations.
- Strategize, analyze, and design hydrogen fueling stations to meet volume and quality demands.
- Establish quality control and safety of the process and design.
- Develop standardized processes and technical procedures.

- Demonstrate a pro-active approach to sourcing of project materials and components.
- Engage effectively with multiple contractors and customers to ensure the highest level of customer service is achieved.
- 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.
- Provide input and recommendations in the budget, work planning and resource allocation processes for the department.
- 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.
- Consistently demonstrate strong teamwork and collaboration skills within the Hydrogen Infrastructure team.
- Foster relationships across Powertech to utilize all of the company's resources for our clients.
- Review and align with the broader corporate objectives such as safety, quality and environment management.

Qualifications

- A degree in Electrical Engineering or an equivalent Engineering discipline from a recognized university.
- Registration as a Professional Engineer with Engineers and Geoscientists of BC. Canadian, out-of-province registrations are acceptable if there is an ability to immediately transfer the accreditation to Engineers and Geoscientists of British Columbia (EGBC).
- Minimum eight years of related experience in design engineering, product development, design for manufacturing & assembly, and test experience ideally in a production environment.
- Significant expertise in several of the following areas is required:
 - Electrical controls systems, motor control circuit, and cabinet design
 - Computer and software systems skills as applicable to position including but not limited to: Word, PowerPoint, Excel, Project, and Outlook.
 - 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
 - Proven ability in creating technical risk assessments for process designs
 - Hydrogen or other high pressure gas experience is desired
- 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

- Experience in estimating costs for prototyping and production.
- Highest ethical standards and professionalism.
- Uncompromising dedication to safety and a commitment to work quality.
- Strategic thinker with exceptional analytical skills.

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

Powertech Labs has a COVID-19 Vaccination Policy that requires employees to have a full series of COVID-19 vaccine and provide proof of vaccination on request. This Policy is currently suspended but may resume at BC Hydro's discretion. While the Policy is suspended, all new employees are required to disclose their vaccination status to Powertech Labs.

HOW TO APPLY 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.