

November 7, 2025

Senior Substation Protection & Control (P&C) Engineer

We are actively hiring an experienced **Senior Substation Protection & Control (P&C) Engineer** to join our growing and dynamic team. This is a key leadership role focused on the design, implementation, and commissioning of high-voltage substations for industrial clients across Western Canada. The successful candidate will play a critical part in ensuring system reliability, safety, and performance, while mentoring junior engineers and collaborating across disciplines. If you're passionate about power systems, substation design, and leading complex engineering projects, we invite you to apply and contribute to our exciting portfolio of work.

Xentric Engineering is a multi-disciplinary engineering consulting firm, specializing in utility interconnections, transmission lines, high-voltage electrical substations, and distribution systems for generating facilities, large industrial operations, and utilities.

JOB TITLE: Senior Substation Protection & Control (P&C) Engineer

JOB NUMBER: 202510-E4-002

LOCATION: Canmore, AB, Calgary, AB, or Langley, BC

OVERVIEW: As the Senior Substation Protection & Control (P&C) Engineer, you will lead a multidisciplinary team of engineers and EITs in the design and execution of high-voltage substation projects. Your role will encompass the full project lifecycle—from conducting advanced power system studies and developing equipment specifications to support procurement and producing detailed design documentation. You will also be responsible for formulating energization and commissioning plans, performing on-site field inspections, supervising commissioning activities, and maintaining strong engagement with clients, utilities, and regulatory stakeholders. This is a leadership position that demands technical excellence, project coordination skills, and a commitment to delivering safe, reliable, and efficient substation solutions.

The job position will include, but not be limited to, the following

1. Substation Design Leadership

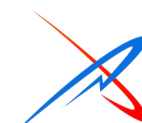
- Lead a multidisciplinary team of engineers and EITs in the design of high-voltage substations.
- Collaborate with civil, structural, and protection disciplines to ensure cohesive and integrated designs.
- Develop both conceptual and detailed designs for substation equipment and layouts.

2. Protection & Control Engineering

- Design and review protection and control schemes for substations, including relay settings and coordination.
- Perform power system studies such as load flow, short circuit, protection coordination, and arc flash analysis.
- Evaluate system performance and recommend technical improvements.

3. Equipment Specifications

- Prepare technical specifications for substation equipment including transformers, breakers, relays, and control panels.
- Work closely with procurement teams to ensure equipment meets project and regulatory requirements.



4. Design Documentation

- Produce and review design drawings, schematics, wiring diagrams, and station layouts.
- Prepare detailed engineering reports and documentation for internal and external stakeholders.

5. Energization & Commissioning

- Develop energization and commissioning plans for substation projects.
- Conduct on-site inspections and provide technical oversight during construction and commissioning phases.

6. Client & Stakeholder Engagement

- Liaise with clients, utilities, and regulatory bodies to ensure project alignment and compliance.
- Provide expert technical guidance and respond to project-related inquiries.

CANDIDATE: The ideal candidate would have the following:

- Bachelor's degree in electrical engineering or a related discipline.
- Professional Engineer (P.Eng.) designation with APEGA and/or EGBC.
- Minimum 5 years of experience in substation design and protection & control systems.
- Strong knowledge of Canadian and international standards (e.g., IEEE, CSA).
- Proven leadership and mentoring capabilities.
- Excellent communication skills, both written and verbal.
- Ability to work independently and manage multiple priorities in a fast-paced environment.
- Strong analytical and problem-solving skills.

The successful candidate will be supplied with a computer workstation, complete with the appropriate software and applications necessary to do the job. The standard work week would be 40 hours, with the hours of work flexible and based on an 8-hour day. This role is primarily an in-office position, however working from home occasionally is permitted.

REQUIREMENTS: This position requires that the successful candidate is legally permitted to work in Canada and is eligible for registration as a Professional Engineer (P. Eng) with either APEGA or EGBC.

ABOUT US: Xentric is a privately owned, engineering firm with nearly 100 years of industry experience. We are 100% Canadian owned and operated, delivering high-quality engineering and consulting services across Western Canada. Led by a collaborative and experienced management team, our reputation is built on technical excellence, proactive communication, and long-term client relationships.

Our mission is to provide outstanding engineering services with uncompromising quality and customer support. We strive to exceed expectations through a solutions-focused approach, anticipating client needs and ensuring successful project outcomes. Our employees contribute to complex, impactful projects in a supportive environment, with access to a comprehensive benefits package and long-term career development. Our main office is in Canmore, AB, with additional offices in Langley, BC, and satellite staff in Kelowna and Calgary; a dedicated Calgary office is being planned for 2026.

APPLYING: To apply, please submit a cover letter (required), resume, and a writing sample (optional but preferred – e.g. a technical memo, report excerpt or coursework) to careers@xentric.ca, referencing the job number in the subject line. We appreciate the interest of all applicants. Only candidates selected for an interview will be contacted.



**BENEFITS:**

- Casual dress
- Company events
- HSA
- Active Living Benefit (Fitness)\$1,000
- Flexible schedule and work environment
- On-site parking
- Paid time off
- GRSP
- Schedule: Monday to Friday

ABILITY TO COMMUTE/RELOCATE:

We're hiring across all our locations! Our Canmore and Langley offices are each about an hour from Calgary and Vancouver, respectively. Please consider your ability to commute or plans to relocate before applying.

