

Federation Engineering

Job Title	<i>Senior Electrical Engineer</i>
Location	<i>Calgary or Sherwood Park, AB (Hybrid Work)</i>
Type	<i>Full-Time</i>

Job Purpose

We're looking for an experienced and versatile **Senior Electrical Engineer** with a strong foundation across all aspects of electrical engineering, from design through to execution. In this role, you'll lead and support electrical scopes of work, review technical deliverables, and ensure high-quality, practical solutions are integrated into every project. In addition to project delivery, you will play a key role in mentoring and developing junior engineers and designers, helping to grow the technical capabilities of the team through hands-on guidance, knowledge sharing, and support. This position offers the opportunity to influence both project success and the professional growth of emerging talent within the electrical discipline. You'll collaborate closely with project managers, construction teams, and other engineering disciplines to deliver successful, efficient outcomes that meet client expectations and drive our projects forward.

The Electrical team is currently engaged in projects ranging from refinery and gas projects, oilsands, energy generation, and SAGD operations. The work ranges from conceptual studies to detailed engineering including electrical design for integration, report generation and analysis, CAD software utilization to generate electrical drawings, and any additional tasks as directed by the Project Lead.

Key Duties and Responsibilities

Electrical Design and Project Management:

- Develop electrical design for industrial and oil and gas facilities
- Create power system drawings, such as single line diagrams, MCC layouts, cable schedules, and contactor panel wiring schematics
- Carry out technical evaluations and vendor documentation review
- Lead or contribute to project scoping activities, assist with cost estimating, and provide practical engineering recommendations to clients to support early project planning and decision-making
- Communicate with vendors and contractors as required
- Participate in HAZOPs and close out action items
- Coordinate with other disciplines to ensure timely and accurate flow of design information, while ensuring departmental and client standards are maintained
- Develop and recommend improvements in design standards to lower costs, improve work quality and facility optimization
- May be required to act as single point of contact for client in electrical-only projects

Team Leadership:

- Provide mentorship and technical / career development guidance for electrical team members
- Provide inspirational leadership to electrical team, acting with integrity and humility

Qualifications

Skills and Experience:

- Degree in Electrical Engineering with 10+ years of experience
- Registered P.Eng. with APEGA
- Experience working on Management of Change (MOC) projects

- Experience in the oil and gas sector
- Working knowledge of preparing various electrical calculations, such as voltage drop, cable tray fill, demand load, and others
- Working knowledge of ETAP or SKM electrical engineering software is an asset
- Familiarity with CEC and international codes, standards, and approved codes of practice
- Self-starter with the ability to work independently when required
- Strong experiences in interdisciplinary coordination
- Proficiency in MS Office Suite programs
- Field or shop experience is an asset
- Valid drivers license required

Personal Characteristics:

- Technically versatile with a generalist mindset; comfortable exploring a wide range of engineering disciplines
- Self-starter, independent worker, dedicated, and dependable
- Decisive, willing to make well reasoned decisions and accountable for decisions
- Excellent written and verbal communication skills
- Believes in making long term business relationships with team members and clients
- Interested in investing in a long-term career with a growing company

Working Environment

At Federation, we support flexible working arrangements for our team. Our hybrid work model includes three days in the office (Tuesday to Thursday) and two days of your choice, whether from home or the office (Monday and Friday). We also offer half-day Fridays to promote work-life balance.

From time to time, travel to client sites or other Federation offices may be required (up to 10%).

How to Apply

Please send your resume and cover letter to hello@federationengineering.com. Indicate the position title in the subject line of your email.

We thank you for your interest, however, only those applicants selected for an interview will be contacted.