



Electrical Maintenance Engineer Permanent, Full-Time Whitehorse, Yukon

The Opportunity: Electrical Maintenance Engineer

Who we are: Yukon Energy is the primary generator and transmitter of electrical energy in the Yukon territory, operating within the Traditional Territories of Yukon First Nations. We take pride in our commitment to sustainability and collaboration with Indigenous communities across all our operations.

What will you do: As the Electrical Maintenance Engineer, you will:

- Support the Operations department by ensuring the reliability, performance, and safety of electrical assets across hydro and thermal generation plants, high-voltage substations, and protection and control systems.
- Conduct planned and unplanned maintenance, troubleshoot electrical issues, and assist in commissioning capital projects.
- Review periodic maintenance test reports, identify required corrective actions, and ensure implementation.
- Work with Asset Management and Engineering teams to develop strategies for long-term asset management and optimization.

What you need to succeed:

- Registered Professional Electrical Engineer, eligible for registration in Yukon.
- Minimum of 4 years of experience in utilities, including technical and operational experience with electrical systems in power generation and high-voltage substations.
- Good working knowledge of various electrical generating assets, including hydro generators, thermal power plants, diesel-fueled generators, and renewable energy sources (wind, solar, BESS).
- Strong understanding of electrical systems, including generators, transformers, transmission lines and structures, substations, distribution systems, and associated control systems, visibility, metering, and communications.
- Experience troubleshooting electrical control systems, including protection and automation systems, with sufficient expertise to provide guidance.
- Proficiency in SCADA serial and TCP/IP communication protocols, such as DNP3, Modbus, ICMP, and NTP is highly beneficial.
- Ability to review and interpret electrical drawings, control schematics, wire termination sheets, operation manuals, and other technical documentation.
- Experience supporting field infrastructure commissioning, including commissioning of electrical equipment, control systems, and SCADA integration.
- Proficient in troubleshooting small to medium-sized electrical control systems and automation setups.
- Good understanding of workplace hazards in high-voltage substations and electrical generating facilities, with the ability to implement appropriate safety measures.
- Ability to develop and enforce safe work plans, conduct Job Safety Analysis (JSA), and facilitate tailboard safety meetings to ensure compliance with safety regulations.
- Familiarity with electrical protection systems, including SEL relays, RTAC, Beckwith relays, AcSElerator Quickset, AcSElerator RTAC, Emerson PLCs, and other protection and control devices.
- Strong problem-solving and analytical skills, with the ability to troubleshoot and resolve complex electrical issues.
- Strong multi-tasking, prioritization, and organizational skills to manage multiple projects and deadlines efficiently.
- Excellent interpersonal and communication skills, with a strong client-service orientation and the ability to work effectively with internal teams, contractors, and stakeholders.



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- Proficiency in Windows-based software applications and work order management systems.
- A valid class 5 driver's license.
- A valid first aid certificate.
- Ability to work effectively in a team and a diverse cultural environment.

Compensation: Competitive salary and benefit package.

What is in it for you:

- Northern Allowance: \$7,000.00 + 5% Base Pay added to Base Salary
- Comprehensive Benefit Package that begins the first day of employment
- RRSP Matching Program begins first day of employment
- 4 weeks of vacation leave, 4 weeks of sick leave, 40 hours of special leave
- Travel Allowances for employee and their spouse and dependent(s)
- Annual Wellness Subsidy
- Cell Phone Subsidy
- Flexible work arrangements/Work From Home options
- Relocation Assistance
- Training and Development opportunities
- Opportunity to be a part of something greater and help the Yukon

Yukon Energy values diversity in the workplace. We strive to achieve a skilled workforce that is representative of the population we serve, and we are committed to the employment and professional development of Yukon First Nations citizens. First Nations candidates are encouraged to self-declare.

To **apply**, please go to [Recruitment \(adp.com\)](#).

If you have any questions, please feel free email People & Culture via email at hr@yec.yk.ca. The posting will remain open until the position is filled.

We thank all candidates for applying but only short-listed candidates will be contacted. Applicants must be legally entitled to work in Canada for any employer without employer sponsorship.

Date Posted: February 7, 2025