



EMPLOYMENT OPPORTUNITY

Closing Date: 07.04.2025

HVDC TECHNICAL OFFICER WINNIPEG, MB

Manitoba Hydro is consistently recognized as one of Manitoba's Top Employers!

Great Benefits

- Competitive salary and benefits package.
- Defined-benefit pension plan.
- Nine-day work cycle which normally results in every other Monday off, providing for a balanced approach to work, family life and community.
- Flex-time and partially remote work schedule (providing the option to work remotely 3 days per 2 week period), depending on nature of work, operational requirements and work location.

Manitoba Hydro is a leader among energy companies in North America, recognized for providing highly reliable service and exceptional customer satisfaction. Join our team of Manitoba's best as we continue to build a company that supports innovation, commitment, and customer service, while actively supporting a diverse, equitable and inclusive workplace.

We are seeking an HVDC Technical Officer to work in the Station Design Department. Under the general direction of the HVDC Principal Automation & Controls Engineer or delegate, you will directly perform and/or manage others in the development of system designs, detailed engineering drawings, technical standards, and equipment specifications for the design of high-voltage apparatus, HVDC controls, protection, and related auxiliary systems. You will provide direction and technical expertise to the design, planning, construction, operations, and maintenance of the enterprise's HVDC, Transmission, and Distribution facilities.

Responsibilities:

- Responsible to prepare and direct preparation of scoping, estimating, conceptual design, detailed design, specification, programming, testing and commissioning activities, and documentation for all aspects of the automation, control systems (including SCADA), metering, protection, and auxiliary systems associated with converter stations. Design custom electronic equipment, supervising the preparation of engineering drawings, specifications, and other design documentation.
- Determine the required technical specifications and prepare testing procedures.
- Provide advanced technical expertise and direction to staff and consultants in the creation of complex automation, control, metering, protection, and auxiliary system implementations for the converter stations.
- Develop and maintain strong working relationships with other design sections, departments, consultants, contractors, and manufacturers' representatives as required to ensure equipment and designs meet current standards and requirements.
- Provide specialized technical advice/consulting internally and to other departments in establishing criteria for the operational reliability and maintainability of complex automation, control systems (including SCADA), metering, protection, and auxiliary systems associated with converter stations.
- Develop, guide, and prepare automation, control systems (including SCADA), metering, protection, and auxiliary system standards to ensure designs are technically current, are cost-effective, and satisfy end-user requirements. Provide recommendations to other design teams on how to best meet end-user functional requirements.
- Provide advanced technical support and guidance to other design and maintenance groups on the application of complex controls and automation systems, including, but not limited to, HVDC controls and protection, RTU, Programmable Logic Controllers (PLCs), Intelligent Electronic Devices (IEDs), HMI, gateways, and automation processors used in substation automation and remote supervisory systems.
- Make occasional field trips to assemble design information and to ensure conformity of construction with design.
- Meet committed schedules and estimates for engineering and other project deliverables.

Qualifications:

- A two-year diploma in Electrical Technology from a college or institute of recognized standing and a minimum of five years of directly related experience in the design, construction, or maintenance of HVDC systems.
- Demonstrated advanced knowledge of HVDC technology, controls, instrumentation, and protection systems, including both

- modern digital systems, such as those used in Bipole 3 and legacy analog systems, such as those used in Bipoles 1 and 2.
- Working knowledge of Synchronous Condensers, including excitation, protection, control, instrumentation, and auxiliary systems.
 - Working knowledge of HVDC converter transformers, including protection, control, instrumentation, auxiliary systems, and tap-changers.
 - Working knowledge of low-voltage AC and DC electrical distribution system design, including equipment sizing, protection coordination, and station battery sizing.
 - Working knowledge of station design to include control building and associated electrical design, control panel layout, and knowledge of associated wiring and cabling design practices.
 - Experience in the design, specification, operation, or maintenance of HVDC instrument transformers and HVDC apparatus will be considered an asset.
 - Experience in analysis and design of analogue and digital electronics used for closed-loop control, sequence control, and monitoring systems will be considered an asset.
 - Proven interpersonal skills and ability to provide technical guidance to others.
 - Demonstrated effectiveness in carrying out complex projects and tasks with minimal supervision.
 - Possess and maintain a valid Province of Manitoba Driver's Licence.
 - Required to travel by all modes of transportation, i.e., air, land, and water.

Salary Range

Starting salary will be commensurate with qualifications and experience. The range for the classification is \$43.14-\$59.52 Hourly, \$82,657.38-\$114,055.50 Annually.

Apply Now!

Visit www.hydro.mb.ca/careers to learn more about this position and to apply online. The deadline for applications is **APRIL 7, 2025**.

We thank you for your interest and will contact you if you are selected for an interview.

This document is available in accessible formats upon request. Please let us know if you require any accommodations during the recruitment process.