



EMPLOYMENT OPPORTUNITY

Closing Date: 28.01.2025

SENIOR POWER SYSTEMS STUDIES ENGINEER 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 a Senior Power Systems Studies Engineer to join our Grid Infrastructure Planning Department. Under the general direction of the Senior Grid Supply Planning Engineer, the Senior Power Systems Studies Engineer will lead transmission planning studies involving generation station outlet transmission and existing and future interconnections for their impact on the development of the Manitoba Hydro interconnected power system.

Responsibilities:

- Lead a highly skilled technical team in developing complex simulation models and conducting planning studies utilizing PSS/E or DSA PowerTools (load flow, transient stability, contingency analysis, voltage stability, fault analysis) and make recommendations for generation station outlet transmission and interconnections with neighbouring utilities.
- Lead and conduct Interconnection Evaluation and Facility Studies for Generator Interconnection requests under the Manitoba Hydro Open Access Interconnection Tariff (OAIT).
- Lead and conduct System Impact and Facility Studies for long-term firm Transmission Service Requests under the Manitoba Hydro Open Access Transmission Tariff (OATT) or other tariffs.
- Conduct reliability assessments for compliance with NERC and Manitoba Hydro standards (e.g., CIP-014, PRC-012, MH-TPL-007).
- Prepare estimate and schedule requests for new generation interconnection and transmission service request studies.
- Present new generation interconnection study results and transmission service request results to external Transmission Operator and Owner Stakeholders for comment.
- Assist with maintaining and updating Manitoba Hydro's Transmission System Interconnection Requirements (TSIR).
- Represent Manitoba Hydro and provide expertise to internal/external working groups, task forces, and committees as appointed.

Qualifications:

- Graduate in Electrical Engineering from a University of recognized standing with a minimum of seven years of related experience including three years of experience directly related to the analysis and planning of high voltage AC/DC systems and a minimum of one year of supervisory experience.
- Professional member in good standing with Engineers Geoscientists Manitoba (or willingness and ability to attain within a specified amount of time).
- Must have completed Standards of Conduct training or be willing to complete within two weeks of start date.
- Demonstrate advanced knowledge of computer programs (PSS/E or DSA PowerTools) used for electric power system studies such as load flow, contingency analysis, transient stability, voltage stability and fault analysis.
- Demonstrate advanced knowledge of planning standards and criteria and the study procedures for transmission service requests and generator interconnection requests.

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- Working knowledge of control systems (governors, exciters and HVDC power controls), protective relaying and the electrical characteristics of transmission lines, transformers, generators, and loads.
- Working knowledge of a programming language such as Python is an asset.
- Working knowledge of electromagnetic transient programs (PSCAD/EMTDC or EMTP) is an asset.
- Basic knowledge of RTDS testing and RSCAD programming is an asset.
- Working knowledge of equipment standards (CSA, ANSI, IEEE, IEC, NEMA) is an asset.
- A master's degree and/or post-graduate courses in power systems are assets.
- Must have a minimum of one year of supervisory experience.

Salary Range

Starting salary will be commensurate with qualifications and experience. The range for the classification is \$51.34- \$70.34 Hourly, \$98,380.88-\$134,784.78 Annually.

Apply Now!

Visit www.hydro.mb.ca/careers to learn more about this position and to apply online. The deadline for applications is **JANUARY 28, 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.

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