



EMPLOYMENT OPPORTUNITY

Closing Date: 13.01.2025

GENERATION SYSTEM MODELING 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 Generation System Modeling Engineer to work in the Energy Resource Planning Department. Under the technical direction of the Capacity Expansion Planning Technical Lead, the Generation System Modelling Engineer provides engineering support related to the development and application of computer modeling and analytic tools to investigate the long-term operation of the generation system, including capacity expansion, production costing, and resource adequacy. This includes formulating the methodology for new models, enhancing the capabilities of existing models, calibration to ensure modelling is representative of actual system operation, and development of pre/post-processing tools.

Responsibilities:

- Set up, calibrate, and execute modelling tools used to represent long-term system operation for production costing, capacity expansion planning, and resource adequacy studies.
- Develop, maintain, and enhance pre/post-processing and results visualization tools.
- Document and communicate modeling assumptions, inputs, methodologies, results, and recommendations to internal and external stakeholders.
- Support studies on capacity accreditation, planning reserve margins, and resource adequacy.
- Maintain an understanding of the Manitoba Hydro hydro-electric system and its interconnections with extra provincial energy markets.
- Maintain a thorough understanding of the data inputs required for long-term resource planning.
- Understand the needs of internal departments which utilize the results from planning studies.
- Maintain strategic relationships with subject matter experts related to modelling input and output data.
- Collaborate with other utilities, consultants, industry groups, standards organizations, researchers, and universities on long-term planning tools.

Qualifications:

- Must be an Engineering graduate from a recognized university and have a minimum of six years of work experience, with a minimum of one year of experience related to long-term system planning for a hydro-electric utility.
- Demonstrated experience in applying computer models for systems simulation and optimization.
- Modelling experience related to the operation of multi-reservoir, hydro-electric systems, or optimization of electrical system capacity expansion plans would be an asset.
- Post-graduate courses with specialization in optimization techniques and computer modeling would be an asset.
- Must be analytically minded with a high-degree of initiative and be able to provide leadership and guidance in a team environment and to work well independently.
- Working knowledge of computer programming, with advanced knowledge in Microsoft Office.
- An understanding of engineering economic evaluations is an asset.

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- Ability to plan, organize, and control activities using good engineering and business judgment.
- 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.
- Must obtain and maintain a current Personnel Risk Assessment and a "Clear" security rating in accordance with Manitoba Hydro policy P513.
- Critical Infrastructure Protection (CIP) Training is required and must be completed prior to transfer date and renewed annually.

Salary Range

Starting salary will be commensurate with qualifications and experience. The range for the classification is \$47.32-\$65.33 Hourly, \$90,677.86-\$125,192.08 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 13, 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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