Manitoba Hydro
energy for life

EMPLOYMENT OPPORTUNITY

Closing Date: 2026/01/07

Resource Adequacy Studies Engineer

Winnipeg, MB

Manitoba Hydro is consistently recognized as one of Manitoba's Top Employers! We are 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 champions safety, supports innovation, and delivers on our commitment to customer service - while actively fostering a diverse, equitable, and inclusive workplace reflective of the communities we serve.

Great Benefits

-   Competitive salary and comprehensive benefits package.
-   Defined-benefit pension plan for long-term financial security.
-   Nine-day work cycle, typically resulting in every other Monday off to support 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.

Position Overview:

We are seeking a Resource Adequacy Studies Engineer to join our Energy Resource Planning Department. Under the general direction of the Senior Market and Resource Adequacy Engineer, the Resource Adequacy Engineer provides engineering expertise and leadership related to the development and application of computer modeling and probabilistic analytical tools to investigate the resource adequacy of the Manitoba Hydro system. The position provides key input and leadership into the development and implementation of modeling strategies using probabilistic analysis computational models to develop a better understanding of the planning reserve margin, while continually re-evaluating current practices for opportunities to enhance existing model capabilities, pre- and post- processing tools, data sources and analytical techniques. Annual planning deliverables and planning studies are supported through model execution and results analysis.

Responsibilities:

-   Design, lead, and undertake probability resource adequacy modelling activities of the interconnected Manitoba Hydro system to develop a better understanding of the planning reserve margin and its drivers.
-   Lead the implementation and maintenance of the SERVM tools, in conjunction with other Energy Resource Planning staff and support staff from the Information Technology Division.
-   Maintain comprehensive knowledge of Manitoba Hydro's generation system operations, inter-market connections, and all data inputs essential for long-term planning, as well as an up-to-date understanding of current generation system planning and system optimization best practices and theory and incorporate into the resource adequacy analysis.
-   Perform studies on capacity resource accreditation, planning reserve margins, and resource adequacy for the NERC Probabilistic Analysis (ProbA).
-   Support NERC Long Term Resource Adequacy (LTRA) data submissions, and support NERC Summer Reliability Assessment (SRA) and Winter Reliability Assessment (WRA) as required.
-   Lead the development of executive reports and updates, technical documents, and memoranda, ensuring thorough documentation of resource adequacy planning study results and delivering impactful presentations.
-   Be alternate Manitoba Hydro representative on the NERC Reliability Assessment Committee (RAS) and NERC PAWG (Probabilistic Analysis Working Group).
-   Document and communicate modelling assumptions, inputs, methodologies, results, insights, conclusions, and recommendations to internal and external stakeholders, aiding in the creation of key planning documents.
-   Continually review internal customer needs for planning study results, identify modelling gaps/opportunities, and lead improvements in models, tools, and methodologies.
-   Enhance Manitoba Hydro's long-term planning reputation by sharing innovative solutions through industry engagements, journal papers, conferences, and academic contributions.

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Qualifications:

- Must be an Engineering graduate from a recognized University and have a minimum of seven years of work experience, with a minimum of one year of experience related to long-term system planning for a hydroelectric utility.
- Professional member in good standing with Engineers Geoscientists Manitoba (or willingness and ability to attain within a specified amount of time).
- Post-graduate courses with specialization in optimization techniques and computer modeling would be a definite asset.
- Demonstrated experience in applying computer models to simulate and optimize the operation of power systems.
- Demonstrated experience in applying probabilistic computer models to study resource adequacy of power systems 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 computers and computer programming, including Microsoft Office.
- A basic understanding of engineering economic evaluations is an asset.
- Ability to plan, organize and control activities using good engineering and business judgment.
- 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 $51.34-$70.34 Hourly, $98,380.88-$134,784.78 Annually.

Apply Now!

Ready to join a team that energizes Manitoba and puts safety, innovation, and inclusion at the heart of everything we do? Visit www.hydro.mb.ca/careers to learn more about this position and to apply online.

Application deadline: JANUARY 7, 2026.

We appreciate your interest in Manitoba Hydro and thank all applicants. Only those selected for the next stage of the selection process will be contacted.

If you require accommodations during the recruitment process or need this posting in an accessible format, please let us know - we're committed to a barrier-free experience for all candidates.