



EMPLOYMENT OPPORTUNITY

Closing Date: 2026/07/28

Senior Planning Engineer (Electrical 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.

Position Overview:

We're looking for a Senior Planning Engineer to join our Grid Infrastructure Department. Under the direction of the Senior Planning Engineer identify, initiate, and conduct complex power system planning studies necessary to ensure reliable and economic expansion of the electrical transmission network.

Responsibilities:

- Perform or lead power system planning studies (load flow, transient stability, contingency analysis, voltage stability, and electromagnetic transient) and make recommendations for system reliability enhancement, customer load interconnection, asset replacement and supporting asset life cycle decisions.
- Lead the development of simulation models and perform fault analysis studies for internal and external stakeholders, delivering comprehensive reports.
- Conduct reliability assessments for compliance with applicable industry standards including NERC and Manitoba Hydro standards.
- Conduct integrated resource planning studies to ensure reliable and economic expansion of Manitoba Hydro's bulk electric system.
- Develop appropriate tools and study packages to facilitate large power system simulations and develop/revise applicable planning documents and standard workflow process flow chart.
- Develop conceptual single line diagrams (CSLD), capital budget single line diagrams (CBSLD) and capital budget documentation including the preparation of Capital Investment Concepts (CIC) and Capital Investment Justifications (CIJ) for capital expenditures.
- Prepare and make presentation in defense of reports and recommendations to interested parties outside of the department such as the Corporate Value Framework.
- Direct engineering support staff in the performance of technical studies and provide technical expertise to others in the section/department.

Qualifications:

- Graduate in Electrical Engineering from a University of recognized standing and a minimum of seven years of related work experience of which three years should be in power systems analysis and planning.
- Professional member in good standing with Engineers Geoscientists Manitoba (or willingness and ability to attain within a specified amount of time).
- Proficient knowledge of computer programs (such as PSS/E or DSA PowerTools) used for electric power system studies such as load flow, contingency analysis, transient stability, voltage stability and fault analysis.
- Experience with programming languages such as Python is an asset.
- Experiences and/or post-graduate courses in power system dynamics, power system expansion, HVDC/FACT devices or voltage stability would be an asset.

- In depth understanding of interconnected power systems and in the application of power system planning criteria and engineering economics to power system planning analysis.
- Experience with planning of Manitoba Hydro system would be an asset.

Salary Range

Starting salary will be commensurate with qualifications and experience. The range for the classification is \$52.88-\$72.45 Hourly, \$101,332.40-\$138,828.30 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: JULY 28, 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.