Source: **BC Hydro**
Job Title: **Transmission Planning Engineer**
Job Location: **Burnaby, British Columbia, Canada**
Annual Salary: **$ 107,000.00 - 135,300.00**

Powered by water... and by people like you

Providing clean electricity to 4 million customers takes a diverse workforce and that's where you come in. We need your talent to help us build major projects to meet growing demand. To help our customers find clean energy solutions for their homes and businesses and to be ready to respond during storms and outages to keep our system reliable.

Working for BC Hydro is meaningful. And now, the stakes have been raised as we work towards a solution to climate change while safely providing clean, affordable electricity to our customers.

We offer a healthy work life balance, training opportunities and career progression. We're proud to be ranked as one of B.C.'s Top Employers and one of Canada's Best Diversity Employers. Join us as we build an even cleaner B.C.

JOB DESCRIPTION

BC Hydro Transmission Asset Planning has a challenging opportunity available within Planning Coordinator & Bulk Transmission Planning team. The selected candidate will join BC Hydro's Planning Coordinator and Bulk Transmission Planning team as a Transmission Planning Engineer, supporting the development of Near-Term and Long-Term Transmission Plans through a range of power system studies. This includes performing independent analyses such as short circuit calculations, power flow studies, and stability assessments, as well as developing alternative transmission solutions. The role also involves supporting compliance with various Mandatory Reliability Standards, including but not limited to the Planning Coordinator (PC) function under standards such as FAC-002, TPL-001, TPL-007, MOD-032, and MOD-033.

Duties:

* Independently perform power system studies, including short circuit, power flow, and stability studies.
* Perform various system studies including annual TPL assessments, network integration transmission service studies, and interconnection impact studies.
* Developing system reinforcement alternatives to address the potential system constraints and provide technical leadership to projects.
* Provide technical justifications and support major capital projects CPCN applications.
* Work/coordinate with adjacent utilities on various planning activities including performing inter-utility studies when required and develop coordinated solution while working with the impacted Entities.
* Understanding of various NERC reliability standards and WECC planning criteria is an asset.
* Represent BC Hydro interests in WECC/NERC working groups.
* Develop a Geomagnetic Induced Current (GIC) model for the BC Hydro area and perform GIC/GMD (Geomagnetic Disturbance) studies and collaborate with stakeholders to develop corrective action plans.
* Collect power system disturbance data and validate steady-state and dynamic power system models used in BC Hydro area (MOD-033).
* Contribute to the study methodologies and implementation procedure documents for various MRS standards.

Qualifications:

* Bachelor's Degree or Higher in Electrical Engineering: The degree must be recognized by Canadian universities.
Candidates with a strong academic background, such as a Master's or PhD in Power System major, will be given preference. Expertise in planning and operating transmission systems within a power utility setting is highly valued.
** Senior Engineer:
• Minimum of eight (8)+ Years of Experience in Electrical Power System Studies: The candidate should have hands-on experience in various power system studies, including short-circuit calculations, power flows, voltage stability, and dynamic stability simulations. Additional experience in model validation and geomagnetic studies is an asset. The candidates with less working experience in power system studies will be considered at lower level of engineer position.
• Professional Engineer Registration: The candidate should be either registered as a Professional Engineer with the Engineers and Geoscientists of British Columbia (EGBC) or be eligible for registration.
** Engineer 2:
• Minimum of four (4)+ Years of Experience in Electrical Power System Studies: The candidate should have hands-on experience in various power system studies, including short-circuit calculations, power flows, voltage stability, and dynamic stability simulations. Additional experience in model validation and geomagnetic studies is an asset. The candidates with less working experience in power system studies will be considered at lower level of engineer position.
• Professional Engineer Registration: The candidate should be either registered as a Professional Engineer with the Engineers and Geoscientists of British Columbia (EGBC) or be eligible for registration.
** Engineer 1
• Engineer in Training or Professional Engineer Registration: The candidate must have an educational background in electrical engineering, with a preference for those specializing in power systems. The candidate should be either registered as a Engineer in Training or Professional Engineer with the Engineers and Geoscientists of British Columbia (EGBC) or be eligible for registration.
* Proficiency in Power System Simulation Tools: Demonstrated skills in using power system simulation tools such as PSS/ E, GE-PSLF, DSATools, or equivalent professional programs (e.g., Power World, ASPEN).
* Solid Understanding of Fundamental Engineering Concepts: Knowledge of engineering principles related to system operations, transmission designs, station designs, and system protections and controls.
* Familiarity with Mandatory Reliability Standards: A strong understanding of Mandatory Reliability Standards, transmission utility business, and regulations.
* Effective Communication and Organizational Skills: Strong interpersonal communication, technical writing abilities, and the ability to work collaboratively in a team environment.
* Effective Communication and Organizational Skills: Strong interpersonal communication, technical writing abilities, and the ability to work collaboratively in a team environment.

ADDITIONAL INFORMATION

- A comprehensive benefits package
- A minimum of 15 paid vacation days
- A lifetime pension
- Flexible work model, depending on your role type

- Training and development courses
For more information on the benefits we offer, visit bchydro.com/benefits.

What else you should know
* This posting is for a Full Time Regular position.
* A condition of employment for this job is that you maintain the following: Engineers & GeoScientists BC (EGBC)= In Good Standing
* Please be advised that this role has been assessed as safety sensitive and pre-qualification alcohol and drug testing will be required as a pre-condition to employment.
Don't forget to update your Candidate Profile with your current resume and copies of your certifications. If applicable, include your Trades Qualification. This will ensure we have all the necessary information to assess your application without any delays.

How to Apply

Interested candidates should submit their applications online at https://app.bchydro.com/careers/current_opp.html by **Nov 23, 2025.**

Click here to access the job posting or visit the BC Hydro "Current Opportunities" Careers page to view and apply for jobs.

You must use a supported browser, such as Firefox, Internet Explorer, Google Chrome or Safari. Your pop up blocker will also need to be disabled for the BC Hydro Careers site.

On the BC Hydro Careers site, click on the Apply button in order to complete the steps to apply for this job. Please be sure to update your Candidate Profile with your current resume and include copies of your certifications, if applicable.
We're always looking for exceptional people to bring new ideas, fresh thinking and the motivation to help shape the electricity system in B.C. It's an exciting time to be a part of our team as we invest in our system and prepare to meet the challenges of tomorrow.

Our values guide our work. Want to join us?

We are safe.
We are here for our customers.
We are one team.
We include everyone.
We act with integrity and respect.
We are forward thinking.

BC Hydro is an equal opportunity employer.

We include everyone. We welcome applications from anyone, including members of visible minorities, women, Indigenous peoples, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to productively engage with diverse communities.

We are also happy to provide reasonable accommodations throughout the selection process and while working at BC Hydro. If you require support applying online because you are a person with a disability, please contact us at Recruitmenthelp@BCHydro.com

Flexible work model role definitions
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Our four role types identify the degree of flexibility an employee could have to work from home based on the type of work they do. The flexibility for an individual job is up to the manager for each position and the operational requirements. Employees also have the right to work full-time from the office if they prefer. All of our roles require at least some in-person time.

IBEW/Field – No option to work from home
Resident – Works primarily (4+ days per week) in the office.
Hybrid – May be able to work from home up to 3 days per week.
Remote – Works from home 4+ days per week