

STATION DESIGN ENGINEER

Oakville, ON | Full-Time | Design Engineering

ABOUT NBM ENGINEERING

For over **35 years**, **NBM ENGINEERING** has been helping shape the infrastructure that keeps communities powered, connected, and moving forward. As a **trusted engineering and consulting firm**, we partner with municipalities, hydro utilities, and telecommunications providers across Canada to deliver Electrical and Civil Engineering Design, Compliance & Asset Management, Geomatics Support, and Project Management services.

At NBM Engineering, we believe great engineering creates lasting impact. Guided by our values of **integrity, collaboration, technical excellence, health and safety, accountability, and continuous improvement**, we empower our people to solve complex challenges, support critical infrastructure, and help build stronger, safer, and more sustainable communities for future generations.

ABOUT THE ROLE

Design the power infrastructure that keeps communities and industries running.

At NBM Engineering, our **STATION DESIGN ENGINEERS** play a critical role in the planning, design, and delivery of electrical utility infrastructure projects. Working alongside multidisciplinary teams, you'll contribute to the design and modernization of substations, distribution stations, and power system facilities that support the safe and reliable delivery of electricity across Ontario.

This role is ideal for a licensed Professional Engineer (P.Eng.) in Electrical Engineering who is passionate about power systems, technical excellence, and solving complex engineering challenges. Whether leading design initiatives, reviewing technical drawings, or collaborating with utility stakeholders, you'll have the opportunity to shape infrastructure projects that serve thousands of customers and communities.

WHAT YOU'LL DO

As part of our team you will do:

SUBSTATION DESIGN & ENGINEERING

- Lead or support the design of medium- and high-voltage electrical substations, including Municipal Stations (MS) and Transformer Stations (TS).
- Prepare detailed engineering design packages, including:
 - Single-line diagrams

- Electrical schematics
- Wiring diagrams
- Station layout drawings
- Interface drawings and design documentation
- Design Protection & Control (P&C) systems, relay coordination schemes, and station auxiliary systems.
- Develop SCADA/RTU integration and communication interface designs.
- Design DC systems, battery banks, charger systems, busbar configurations, feeder cells, and cable termination arrangements.
- Incorporate oil containment systems and underground duct bank designs into station projects.

POWER SYSTEM STUDIES & ANALYSIS

- Conduct Arc Flash and Short Circuit studies.
- Complete Connection Impact Assessments.
- Perform grounding analysis and grounding system design using IEEE standards.
- Carry out Protection & Control coordination studies.
- Perform cable ampacity calculations and technical evaluations.

PROJECT DELIVERY & CLIENT COORDINATION

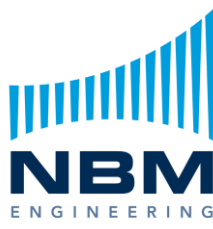
- Collaborate with project managers, engineers, designers, and drafting teams throughout project execution.
- Support project planning activities and customer design package preparation.
- Participate in client meetings, pre-construction meetings, and project progress reviews.
- Provide technical expertise and recommendations to clients and project stakeholders.

PROCUREMENT, CONSTRUCTION & COMMISSIONING SUPPORT

- Prepare technical specifications and Bills of Materials (BOMs).
- Support tendering and procurement activities for substation equipment, including switchgear, transformers, relays, and protection panels.
- Participate in Factory Acceptance Testing (FAT) and site inspections.
- Review and issue As-Built drawings, inspection reports, and energization packages.

QUALITY, COMPLIANCE & TECHNICAL LEADERSHIP

- Ensure designs comply with IEEE, IEC, CSA standards and applicable utility requirements.
- Maintain compliance with the Ontario Electrical Safety Code (OESC) and Ontario Regulation 22/04.
- Follow internal QA/QC processes and engineering best practices.
- Present technical findings and support senior engineering staff in technical reviews and client discussions.



WHAT WE'RE LOOKING FOR

EDUCATION & PROFESSIONAL CREDENTIALS

- Bachelor's Degree in Electrical Engineering from an accredited institution.
- Licensed Professional Engineer (**P.Eng.**) in Ontario, or eligible to obtain licensure within 12 months.

INDUSTRY EXPERIENCE

- 5-7 years of experience in electrical substation or station design.
- Experience supporting utility, hydro, or power distribution projects

TECHNICAL SKILLS

- Proficiency with AutoCAD and MicroStation.
- Familiarity with CYME, ETAP, or similar power system analysis software.
- Knowledge of:
 - Protection & Control systems
 - SCADA systems
 - Grounding design practices
 - Electrical distribution and substation infrastructure

INDUSTRY KNOWLEDGE

- Strong understanding of Ontario electrical codes, regulations, and utility standards.
- Familiarity with IEEE, CSA, IEC, and industry engineering standards.

CORE COMPETENCIES

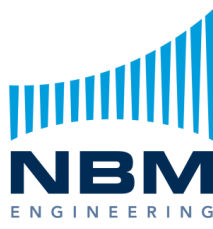
- Strong analytical and mathematical abilities.
- Excellent problem-solving skills and attention to detail.
- Effective communication and stakeholder management skills.
- Strong organizational and project coordination capabilities.
- Ability to work independently and collaboratively within multidisciplinary teams.

WORKING CONDITIONS

- Primarily office-based with occasional travel to substations, client sites, and project locations.
- Requires collaboration with engineers, project managers, utility clients, contractors, and stakeholders.
- Participation in field inspections, Factory Acceptance Testing (FAT), commissioning activities, and site reviews as required.
- Ability to work in active construction and utility environments while adhering to safety protocols and PPE requirements.
- Occasional travel and flexible hours may be required to support project schedules, client meetings, and commissioning activities.
- Must be able to manage multiple projects and priorities in a fast-paced engineering consulting environment.

ADDITIONAL INFORMATION

- **Language of Work:** English
- **Work Authorization:** Eligible with valid Work Permit



COMPENSATION & BENEFITS

ANNUAL SALARY RANGE: \$80,000 to \$130,000 CAD
BENEFITS: Health Benefits (Vision, Dental, Drug Prescription, etc.), RRSP Match

HOW TO APPLY

Interested candidates are invited to complete:

☒ [Candidate Information Data Sheet](#) (required)

Please note: Applications will only be considered once both the Resume and Candidate Information Data Sheet have been received.

Join NBM Engineering and help shape safer, smarter, and more connected communities through innovative street lighting design solutions.

We thank all applicants for their interest. Only those selected for an interview will be contacted.

NBM Engineering is an Equal Opportunity Employer. Accommodations are available upon request throughout the recruitment process.