



## **Intermediate Project Engineer Electrical, Mechanical or Wind Energy Engineer**

March 2009

### **POSITION SUMMARY**

The Project Engineer is responsible for the development, implementation and ongoing operation of testing and technology development projects in support of WEICan's mandate.

### **PRINCIPAL RESPONSIBILITIES AND ACCOUNTABILITY**

- Responsible for selection, design, installation, commissioning, maintenance and calibration program of environmental; electrical and process measurement; and data acquisition systems.
- Assists in the preparation of project proposal submissions, including development of proposal estimates of labour and material costs. Assists with development of project agreement documents.
- Responsible for leading implementing and executing accreditation process for WEICan.
- Take leadership for IEA/IEC standards. Develops operational and testing procedures in accordance with technical standards applicable to wind turbine testing and certification: IEC 61400 series, CSA, etc; measurement and instrumentation standards. Develops and maintains up-to-date site power distribution drawings and documentation.
- Designs test programs, wind turbine performance programs, and certification test programs. Supervises and participates in site testing implementation. Reviews test data for quality control and reduce data for detailed analysis.
- Participates in wind technology development and prototype testing either in partnership with client technology developers or as sole developer.
- Prepares technical papers for submission to journals, periodicals and conferences. Presents technical results at various industry forums.
- Responsible for setting and maintaining high standard of project implementation and maintenance of site systems. Includes development of equipment documentation procedures.
- Assists with monitoring project management, cost tracking, and scheduling of various technical projects.
- Leads the continuous upgrading and maintenance of site information technology and computer and software systems.
- Remains current with information on technical trends, research, applications, and effective practices related to the wind energy industry.
- Background in engineering research an asset.
- Represents WEICan at various meetings.
- Performs other duties as required or assigned.

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**REPORTING TO:** Director of Technology

## **SUPERVISORY RESPONSIBILITIES**

Leads project teams of WEICan engineers, technicians, engineering consultants, research associates, and technical collaborators.

## **COMMUNICATION**

- Excellent communications skills: interpersonal, listening, oral, written, and presentation.
- Ability to communicate effectively at all levels of an organization.
- Abilities in French are an asset.

## **POSITION SPECIFICATIONS**

### Education and Training

- University degree in Electrical, Mechanical or Wind Energy Engineering.
- Or university degree in Engineering with appropriate experience in electrical/mechanical and instrumentation design and implementation.
- Member of, or eligible for membership in, Association of Professional Engineers of Prince Edward Island.
- Masters or Ph.D. in engineering an asset.

### Experience

- Significant experience in high voltage electrical systems, generators and switch gear or mechanical design.
- Experience in instrumentation, digital control systems, and data acquisition systems.
- Experience in field construction work, project management and safety techniques.
- Experience in wind energy technologies and wind power production projects an asset.
- Experience with research projects, and/or ability to attract research funding an asset.

### Skills and Knowledge

- Knowledge of project management techniques.
- Knowledgeable in CSA and CEC standards.
- Knowledge of CAD software packages, particularly AutoCAD, VISIO, and other design software packages, e.g. SolidWorks, Computational Fluid Dynamics, Power System Modelling.
- Knowledge of industrial control technologies.
- Knowledge of wind power production technologies an asset.
- Knowledge of IEC wind turbine standards an asset.
- Knowledge of computer systems, data communication systems and software, including Microsoft Office.
- Advanced interpersonal and team building skills.
- Ability to lead project teams, manages multiple projects, balance priorities, and meet deadlines.

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- Ability to work collaboratively across a range of officials and experts from government, academic, and industry organizations.
  - Ability to work independently.
  - Ability to work with sensitive and confidential information.

## **WORKING CONDITIONS**

- The position primarily involves work in an office environment. Some field work will be involved in support of technical projects both at WEICan and remotely. Field work may include climbing wind turbine towers and wind monitoring towers.
- The position requires intermittent travel. Candidate must be able to hold a passport.
- The position requires flexible work hours.