

# SUBSTATION TECHNICIAN I

Applications are invited from interested and suitably qualified individuals for the position of **Substation Technician I**, FortisTCl, Providenciales.

## Description

The Substation Technician is responsible for the safe and efficient maintenance and operation of substations. Accountable to a Supervisory level technician for all substation maintenance, training and operation functions.

## Main Duties & Responsibilities

- Performs power quality measurements and analysis on the transmission and Distribution Network.
- Installation and maintenance of transmission and distribution devices and equipment.
- Maintains and repairs substation equipment including power transformers, load tap changers, potential transformers, current transformers, high voltage circuit breakers and switchgear, battery and charger systems, and all control equipment used in substations.
- Installs, maintains and, electromechanical and microprocessor based fiber optic cable and network equipment and capacitor control equipment.
- Utilizes computers extensively in the testing of relays, recording of records and information, processor controlled relays.
- Changes and updates drawings to reflect as-built changes to schematics and wiring diagrams.
- Pulls cables and terminates wiring following wiring diagrams.
- Tests, repairs and calibrates protective relays.
- Takes readings on substation equipment and checks to ensure proper operation and calibration;
- Performs preventive maintenance.
- Maintains and repairs high voltage regulators, capacitor controls, emergency generators and street lighting controls.
- Installs and tests primary and secondary metering installations.
- Solves technical problems relating to voltage and distribution transformer installation.
- Assists the operations and maintenance staff at the power plant, with technical problems.
- Maintains telemetering equipment at power plant and substations. Works on energized secondary voltage lines up to 600 volts and repairs and operates manual disconnect switches on all voltages of transmission lines and busses up to 35,000 volts. Meets with customers and resolves any problems relating to voltage, radio interference and billing concerns.
- Takes oil samples of substation equipment and runs tests for contaminants and filters oil if necessary. Tests all new distribution transformers for loss evaluation. Maintains records on all maintenance and technical services provided.

## SUBSTATION TECHNICIAN I

### Main Duties & Responsibilities Cont'd

- Sandblasts and spray paints substation equipment including power transformers, high voltage circuit breakers and switchgear.
- Utilizes aerial equipment when necessary to perform the above tasks;
- Climbs ladders and works on top and inside of power transformers in confined spaces;
- Utilizes electronic test equipment to resolve power quality problems. Performs related duties as needed or assigned.
- Drives company vehicles when required, take charge of any tools, materials and safety equipment, or vehicle assigned to the crew and report all vehicular and other accidents, incidents and damages or injuries.
- Carries out work on live apparatus, conductors or equipment up to 600V as required in accordance with appropriate safety rules.
- Performs other job-related duties assigned by the Supervisor or his designate from time to time.

### Academic/ Technical/ Management Experience and Qualifications:

- A minimum of 2 year in a post-secondary education program, preferably in engineering trades with an emphasis on electrical technology.
- Have completed the EDA Metering Technicians course and a minimum of 2 years field experience
- Six (6) years of combined education and experience in the electrical and electronic field. This would consist of:
  - (a) Four (4) years of practical experience and/or be able to demonstrate knowledge in maintenance of industrial electrical- electromechanical -electronic control equipment which must include:
  - (b) One (1) year and/or the equivalent knowledge of electric power substation apparatus maintenance experience involving testing of power transformers, testing and repairing of power circuit breakers and electrical insulation system testing and repair.
  - (c) Three (3) years and/or the equivalent knowledge of practical experience in testing, calibrating and repairing protective relay devices and revenue meters

## SUBSTATION TECHNICIAN I

### Abilities, Skills, Experience, Aptitude & Judgement:

- Must be capable of satisfactorily interpreting electrical schematic diagrams, wiring diagrams and control logic.
- Possess a considerable degree of skill to perform work by following standard method of procedure.
- Be able to exercise judgment in frequently making decisions.
- Have good health and physical ability adequate for strenuous work.
- Have thorough knowledge of the practices used in the electric power industry.
- Be capable of applying artificial respiration and be able to render practical first aid.
- Be willing and able to work extra and irregular hours as the utility needs may require, and willing to work under unusual or special working conditions; storms, extreme temperatures, winds, darkness, etc.
- Certified to perform work according to FortisTCI Energy Control Procedures
- Familiarity with and competency in the use of computers and standard computing software programs.
  
- **Compensation is commensurate with experience and qualifications.**