



POSITION DESCRIPTION

An Equal Opportunity Employer

Class Title:	Power Plant Operator	FLSA Status:	Nonexempt
Dept./Div.:	Power Plant	Civil Service Status:	Unclassified
Reports to:	Power Plant Supervisor	Employment Status:	Full-time
EEO Status:	Craft Workers	Normal Work Hours:	Day Shift
Employee Name:	95021	DOT/O*Net Code:	950.382-018/ 631.261-010 / 51-8013.00

GENERAL DESCRIPTION:

Performs electrical and mechanical work in the operation, construction and maintenance of the power plant, the hydro-electric generation plant, substations, emergency generators and auxiliary equipment.

Responsible for performing skilled and semi-skilled electrical and mechanical work in the installing, maintaining, calibrating, modifying, overhauling, troubleshooting, and repairing a variety of electrical, mechanical, and electro-mechanical equipment and systems repair, maintenance, monitoring, troubleshooting, modification and testing of combustion turbines and equipment at the Power Plant and Auglaize hydroelectric facilities as well as substations.

POSITIONS DIRECTLY SUPERVISED:

None.

EQUIPMENT OPERATED: (The following list is not intended to be all-inclusive.)

Utility tractor with front-end loader, fork lift, scissor lift, backhoe, and mower; welder; torch; circuit testers, portable generator; hand-operated tools and precision measuring devices; 1-ton truck, 2-ton boom truck; and office equipment.

JOB DESCRIPTION AND WORKER CHARACTERISTICS:

JOB DUTIES in order of importance

ESSENTIAL FUNCTIONS OF THE POSITION: For purposes of 42 USC 12101:

1. Installs, inspects, operates, trouble shoots and maintains Bryan Municipal Utilities generation units powered by diesels engines, natural gas/diesel turbines, or water and all related equipment. Start or stop generation units and other generators, auxiliary pumping equipment, turbines, or other equipment as necessary.
2. Installs, maintains, repairs, troubleshoots and programs the PLC's (Programmable Logic Controllers) used in the electrical and water systems.
3. Maintains and trouble shoots SCADA system.
4. Control or maintain auxiliary equipment, like pumps, fans, compressors, condensers, feedwater heaters, filters to supply water, fuel, lubricants, air or auxiliary power. Clean, lubricate, or maintain equipment, like generators, turbines, pumps, or compressors, to prevent failure or deterioration. Collect oil, water or electrolyte samples for laboratory analysis.
5. Work with Lineworkers in the construction, operations and maintenance of substations, including the installation of transformers, voltage regulators, circuit reclosers, circuit switches and motor operated switches. Tests oil from circuit breakers, voltage regulators and transformers. Checks, operates and maintains mechanical and electrical parts in the circuit breakers, voltage regulators, control panels and transformers. Operates and maintains substation controls, alarm points. Performs the new wiring of substations. Keeps accurate logs on all substations and relaying. Participates in substation switching procedures during planned and emergency repairs and outages. Routinely inspects substations and battery installations and records observations and makes necessary repairs and corrections. Uses laptop for inspection to track trends within transformers and regulators.



6. Installs, operates, and maintains protective relaying for power systems; installs, operates, maintains, and wires switch gear equipment for transfer of power. Test protective relaying systems; trouble shoots, diagnoses, and repairs problems found.
7. Record and compile operations data by completing maintenance forms, logs or reports and other administrative tasks as deemed necessary. Maintain and submit any other documentation requested by Power Production Superintendent.
8. Perform mechanical, electrical and plumbing work in the maintenance and repair of the power plant, hydroelectric plant, substations and related equipment.
9. Inspect equipment, structures, or materials to identify the cause of errors or other problems or defects.
10. Demonstrate regular and predictable attendance.

OTHER DUTIES AND RESPONSIBILITIES:

Perform other duties as assigned (i.e., assist other utility departments as needed; participate in required training as applicable; etc.).

MINIMUM ACCEPTABLE CHARACTERISTICS: (*indicates developed after employment)

Knowledge of: (215) mechanics principles; (216) modern power plant, substation and hydroelectric generating plant operating and maintenance principles, procedures, and practices ; (217) gasoline and diesel engine operation and maintenance; (251) Bryan Municipal Utilities policies and procedures*; (261) employee handbook and union contract*; (263) department policies and procedures*; (301) electric distribution systems, equipment and equipment manuals; (312) mechanical machines and tools, including their designs, uses, repair, and maintenance; (326) laboratory equipment and supplies; (330) working knowledge of modern methods and techniques of electrical installation, generation facility operations, repair and maintenance; (331) combustion engines, hydraulics and electrical systems; (343) transformer, capacitor and substation connections; (422) records management; (477) proper safety practices*.

Skill in: (903) data entry; (905) computer operation; (910) USB, Ethernet & serial communications; (920) Programmable Logic Controllers; (933) maintenance practices or construction work; (934) gasoline and diesel engine operation and maintenance; (935) diesel and natural gas/diesel turbine generator operation and maintenance; (958) motor vehicle operation; (962) proper use of hand and power tools.

Ability to: (601) carry out detailed oral and written instructions; (609) recognize unusual and threatening conditions and take corrective action; (611) define problems, collect data, establish facts, and draw valid conclusions; (612) deal with nonverbal symbols in formulas, equations, or graphs; (617) determine material and equipment needs; (630) read, copy, and record figures accurately; (633) calculate fractions, decimals, and percentages; (634) understand and calculate physics and algebra equations; (652) complete routine forms; (654) prepare accurate documentation; (684) communicate effectively; (660) read and modify relay drawings and electrical schematics; (661) read electrical schematics and blueprints; (661) read and interpret process and instrumentation diagrams (P&ID); (700) recognize safety warnings; (703) comprehend simple sentences with common vocabulary; (708) read and understand electrical, plumbing and mechanical drawings; (709) read meters and charts accurately; (741) work unsupervised for extended periods of time; (745) develop and maintain effective working relationships with associates, supervisors, officials, and general public; (756) be consistently at work and on time, follow instructions, respond to management direction, and solicit feedback to improve performance; (758) adjust to different tools and working conditions during the course of work shift; (767) perform physically demanding work for long periods of time under varying weather conditions and on energized equipment and around noxious odors, fumes, noises, in confined spaces and from heights; (773) Operation of mechanical equipment associated with the various responsibilities of this position; (774) operate and maintain light and heavy-duty electronic construction equipment; (781) work evenings, nights, holidays, and weekends.

QUALIFICATIONS: An example of acceptable qualifications:

Position requires a high school diploma; Associates Degree in maintenance or electrical engineering preferred, four (4) to six (6) years' experience in maintenance and repair of large generators, substations, switchgear, electric and gasoline engines, and associated power plant equipment or an equivalent combination of education, experience, and



training which provides the required knowledge, skills, and abilities. Experience in the operation of protective relay systems and SCADA systems a must. An Associate's Degree in Engineering a plus.

LICENSURE OR CERTIFICATION REQUIREMENTS:

While progressing through power plant operator classifications successful completion of Northwest Lineman College Substation Certification Program or the successful completion of TPC Certification. A valid driver's license.

WORKING CONDITIONS:**Facility and Work Area:**

The work is performed in the field under various working conditions. Often exposed to noise, dust, heat and other elements, with none continuously present to the extent of being disagreeable.

Physical and Environmental Characteristics:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. This is a field position with employee working in a semi-controlled environment. Employee routinely performs his/her duties in the field at work projects.

The employee:

- Considerable bending, stooping, and climbing associated with daily duties.
- Frequently required to sit; walk; talk or hear; use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms.
- Performs a moderate amount of physical demand; frequent lifting or moving of lightweight materials, or periodic lifting of or moving of average weight materials or occasional lifting or moving of heavy weight materials (75 to 100 pounds).
- Works around noxious odors, fumes, noises, in confined spaces and from heights.
- Works in confined spaces and some overhead and underground construction.
- Works in inclement weather, occasionally from heights, and around energized electrical equipment.
- Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus. Must be able to distinguish letters, numbers and symbols.
- Note: In accordance with the U.S. Department of Labor physical demands strength ratings, this is considered medium work.
- In cases of emergency, unpredictable situations, and/or department needs, the employee may be required to lift, push, pull, and/or carry objects heavier than D.O.L. strength ratings recommend.

The position description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change. This position description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employee(s) will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments.

The position description in no manner states or implies that these are the only duties and responsibilities to be performed by the position incumbent. The duties listed in this document are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

This document does not create an employment contract, implied or otherwise, and may be amended at any time.

My signature below signifies that I have reviewed my position description and that I understand the contents of my position description.

(Employee Signature)

(Date)