

PROVO CITY CLASSIFICATION SPECIFICATION	
<b>Title:</b> W.W. Systems Electrician	<b>Job Code:</b> 2507
<b>Date:</b> June 27, 1999	<b>EEO Code:</b> TE
<b>FLSA Designation:</b> Non-exempt	<b>Civil Service Status:</b> Covered (Unclassified)

**DEFINITION:** This is highly skilled electrical and backup electronic maintenance and repair work on water reclamation plant equipment and controls in the Water Resources Department.

**CLASSIFICATION STANDARDS:** Responsible to the Water Reclamation Plant Maintenance Supervisor for the safe and effective maintenance and repair of electric equipment and controls related to the Water Reclamation facility and lift stations.

**ESSENTIAL DUTIES:** Trouble-shoots and resolves problems associated with electrical equipment --high and low voltage systems, pumps, motors, controls, lighting, SCADA, etc.: identifies symptoms of malfunctioning equipment; reviews events leading up to problem; reviews wiring diagrams, blue prints, and other documentation and drawings; examines wires, contacts, and components; diagnoses the problem based on findings; determines appropriate course of action to resolve and suggests vehicle for resolution to management.

Designs electrical systems and various equipment: formulates best method to design and install motor controls and services; designs new circuit installations for new hardware or to expand existing programs or circuits; sketches diagrams of services; ensures compliance with National Electric Code (NEC); modifies systems or devices for improved service; refines, adjusts, and codes programs for programming logic controls in backup to Instrumentation Technician.

Installs electrical equipment, pumps, motors, lighting feed, and SCADA: suggests purchase of equipment; assembles conduit, hardware, and devices; calibrates meters, dials, and instruments; adjusts controls, set-points, travels, loads, etc. to maintain balance; installs conduit, motors, and controls; ensures compliance with NEC; tests installed equipment to ensure it is functioning properly; assigns and instructs coworkers with completion of work as necessary.

Rebuilds and repairs various electrical equipment: monitors equipment, circuits, and controls to ensure proper operation; cleans motors, contacts, and controls; repairs and reconditions high and low voltage systems; modifies equipment to work with new and existing systems; tests motors, controls, and contacts to ensure repair worked properly.

Assists staff members as needed; and performs other related duties as required.

**MINIMUM REQUIREMENTS:** Associate's degree in industrial electricity or closely-related field; and four (4) years of comparable experience in pneumatic, electrical, and/or electronic maintenance and repair (preferably in a waste water treatment plant) OR completion of a four-year Maintenance Electrician certification through a recognized apprenticeship/journey program and one (1) year of related experience. Equivalent combinations of education and experience will also be considered.

License(s). Utah State Operator License and a valid, lawful Driver License.

**SELECTION FACTORS:** Knowledge of: electrical motors, wiring, pump, alarm, and lighting systems; departmental electrical systems and facilities; related laws, codes, rules and regulations, policies and procedures governing functions of the position; the operations, functions, and terminology common to the work; basic English composition, spelling, and grammar. Skill in: reading, analyzing, and interpreting electrical technical manuals, PIDs, electrical schematics, ladder logic problems, etc.; interpreting a variety of instructions in oral, written, diagram, or schedule form; resolving problems related to proper application of control systems, installation details, and equipment malfunctions. Ability to: work with mathematical concepts and calculations relating to industrial control systems; evaluate programs and procedures and make sound recommendations; effectively communicate with outside contractors and plant personnel at a technical or layman level; develop and maintain effective working relationships with the public, coworkers, and superiors; work at remote field sites with little or no supervision.

**TOOLS AND EQUIPMENT USED:** Mechanical, electrical, and pneumatic hand tools; including, drill press, bench grinders, electrical and gas cutting, welding, and soldering equipment. Precision tools such as micrometers, dial indicators, monitoring equipment, electric carts, trucks, fork lift, and generators. Electrical instruments such as multi-meter and current clamps. High pressure washer, steam cleaner, sandblasters, and standard office equipment.

**PHYSICAL DEMANDS:** Stooping; crouching; crawling; bending; climbing stairs and ladders; working on scaffolding; working on feet for extended periods of time; moving mechanical equipment; and lifting, pushing, or pulling weights of up to 75 pounds.

**ENVIRONMENTAL FACTORS:** Exposure to heights; electronics; high voltage; noise; variable temperatures; humid conditions; fumes; toxic, caustic, or infectious materials; and other hazardous conditions. May include exposure to high-stress situations or environments, including, the meeting of strict deadlines and other stressful conditions related to the workplace. *Note: This position is subject to callback, standby, emergency work requirements, and other non-standard working hours.*



Department Director

4-06-01

Date



Mayor/Chief Administrative Officer

5JUN01

Date

*NOTE: The above statements are intended to describe the general nature and level of work being performed by the person(s) assigned to this classification. They are not intended to be an exhaustive list of all duties, responsibilities, and skills required of personnel so classified. Class specifications are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, change, or delete any and all provisions of this classification at any time as needed without notice. Reasonable accommodations may be made for otherwise qualified individuals who require and request such accommodation. This class specification supersedes earlier versions.*