

PADRE DAM MUNICIPAL WATER DISTRICT CLASS SPECIFICATION

CLASS TITLE: Electrician/Instrumentation & Controls Technician

DEPARTMENT: Operations & Water Quality	ACCOUNTABLE TO: Electrician/Instrumentation & Controls Supervisor	FLSA STATUS: Non-Exempt
SALARY RANGE:	18, 22, 26	

CLASS SUMMARY: Incumbents are responsible for performing skilled electrical/electronic installations, repairs and maintenance on Padre Dam’s Supervisory Control and Data Acquisition (SCADA) system, water distribution pump stations and facilities electrical systems. Duties include: troubleshooting electrical/electronic problems and repairing equipment and related systems; installing electrical/electronic equipment, motors, motor control centers, remote terminal units, seismic units, chlorination equipment, instrumentation, service entrance equipment and control and power wiring; monitoring the electrical/electronic operation of sewage lift stations and water pumping equipment; installing, repairing and maintaining radio telemetry systems, data circuits and phone lines; contacting the power companies on Time of Use (TOU) pumping, and power outages; monitoring load cell devices; performing operational tests on motors, valves, and pump stations; evaluating the condition of auxiliary equipment; inspecting work done by contractors; purchasing equipment and supplies required for projects; engineering/co-engineering electrical projects; monitoring, repairing and maintaining cathodic stations; calibrating instrumentation level/pressure transmitters and ultrasonic level/flow meters; programming Programmable Logic controllers; using control/office computers; and, working with the phone company in designing, installing data circuits, and phone lines; responding to after-hours system emergencies; and such other duties as may be assigned.

DISTINGUISHING CHARACTERISTICS: The Electrician/Instrumentation and Controls Technician is the first level of a two level electrician/instrumentation and controls technician series. The Electrician/Instrumentation and Controls Technician is distinguished from the Electrician/Instrumentation and Controls Supervisor in that Technician does not have supervisory duties or authority.

DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)
1.	Installs, troubleshoots problems and repairs electrical/electronic equipment and related systems which includes: monitoring the electrical functions of the water pumping equipment and sewage lift stations; maintaining and repairing the SCADA system; installing, repairing and maintaining radio telemetry systems and data circuits; performing operational tests on electrical/electronic equipment; performing routine electrical work; and, monitoring, repairing and maintaining cathodic stations.
2.	Responds to both on-duty and after-hours systems emergencies and coordinates and completes the necessary repairs.
3.	Designs/new installations or modifications to existing electrical systems and assists in the planning of electrical systems.
4.	Attends project engineering, construction, and performance meetings.
5.	Works with phone and power companies on related issues to include coordinating work to be done, power problems, power services, power outages and TOU, and in designing and installing data circuits, and phone lines.
6.	Coordinates and inspects work done by contractors ensuring work meets NEC code, and Padre Dam specifications.

PADRE DAM MUNICIPAL WATER DISTRICT CLASS SPECIFICATION

CLASS TITLE: Electrician/Instrumentation & Controls Technician

DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)
7.	Calibrates or programs electrical and electronic equipment, and programs Programmable Logic Controllers.
8.	Purchases equipment and related materials and supplies.
9.	Performs other duties of a similar nature or level.

<p>Knowledge (position requirements at entry):</p> <ul style="list-style-type: none"> • Supervisory Control and Data Acquisition (SCADA) system; • Electrical principles and practices; • Electronic equipment such as Programmable Logic Controllers and modems. • Instrumentation & Control Processes (desirable) • Radio Systems - Multiple Address System (MAS), Spread Spectrum (desirable)
<p>Skills (position requirements at entry):</p> <ul style="list-style-type: none"> • Installing, repairing and troubleshooting problems with electronic equipment; • Performing major electrical work; • Programming Programmable Logic Controllers (PLCs); • Calibrating electronic equipment; • Reading maps, blueprints, ladder, and wiring diagrams; • Using electrical and electronic equipment such as volt meters, tone testing equipment and hand and power tools; • Using computers and related software applications; • Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information, and to receive work direction.
<p>Training and Experience (position requirements at entry): High School Diploma or General Equivalency Diploma (G.E.D.) and four years experience in installing and repairing equipment and related systems; or, an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.</p>
<p>Licensing Requirements (position requirements at entry):</p> <ul style="list-style-type: none"> • Valid California Driver’s License. • Plant Maintenance Grade I certification from CWEA (within one year from date of hire), OR • Instrumentation Society of America certificate desirable.

PADRE DAM MUNICIPAL WATER DISTRICT CLASS SPECIFICATION

CLASS TITLE: Electrician/Instrumentation & Controls Technician

Physical Requirements:

Positions in this class typically require: climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, lifting, fingering, grasping, feeling, talking, hearing, seeing and repetitive motions.

Incumbents may be subjected to moving mechanical parts, electrical currents, vibrations, fumes, odors, dusts, oils, and work space restrictions.

Heavy Work: Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of forces constantly to move objects.

Classification History:

Date: 4/98; 1/02; 1/05; 9/06