

Humboldt Bay Municipal Water District

WATER WORKS HELPER – RELIEF HYDROELECTRIC OPERATOR/RUTH-AREA REPRESENTATIVE

GENERAL PURPOSE

Under direction, operates, maintains, and controls the District's hydroelectric generating facilities, R.W. Matthews Dam and reservoir equipment, and Ruth Lake facilities; acts as District's on-site Ruth area representative; and performs other related duties as required.

ESSENTIAL FUNCTIONS AND DUTIES

1. Controls the operation of hydroelectric generation, R.W. Matthews Dam, reservoir, and water release equipment and facilities at Ruth Lake using established operating parameters.
2. Reads and records voltage level and kilowatt hour production of hydroelectric plant; reads gauges and flow meters to determine and record water levels and flow rates; reports data and plant conditions to other staff.
3. Stops and starts power plant following established procedures; checks annunciators, gauges, and dials to assess plant conditions; checks equipment for malfunctions of maintenance needs.
4. Performs needed maintenance and repair on District facilities; keeps machinery, equipment, structures, piping, work areas, grounds, and landscaped areas in a clean and orderly condition; assists others with complex machinery and equipment maintenance, repair, and overhaul.
5. Inspects control equipment, facilities, and grounds for needed maintenance and repairs and unusual operating conditions.
6. Operates vehicles and equipment; prepares a variety of operating reports; makes rounds of District property to secure facilities and ensure safety.
7. In the absence of the Hydroelectric Operator, responds to hydroelectric plant alarms and emergencies; performs powerhouse and R.W. Matthews Dam inspections in the event of an earthquake; coordinates the Emergency Action Plan activities at Ruth Lake.

REQUIRED KNOWLEDGE, SKILLS, and ABILITIES

- Principles and practices of dams, penstocks, and hydroelectric plants, including electrical generators, turbines, high voltage breakers, transformers, compressors, valves, pumps
- Hydro-electric facility operations, including monitoring, controlling and adjusting operations and output
- Reservoir capacity, water flow, and electric generation calculations
- Repair and maintenance procedures for hydroelectric plants, dams, and related equipment
- Basic water sample collection and laboratory testing procedures
- Basic operation of computers, automated equipment, and standard applications software
- Safe work practices and safety regulations
- Public and media relations

- Cooperative working relationships. Teamwork to solve practical problems and coordinate work among a small, close-knit workforce.

TRAINING AND EXPERIENCE:

Any combination of training and experience that provides the required knowledge and abilities is qualifying. A typical way to obtain the requisite knowledge and abilities would be:

- High school diploma or GED
- Community College, technical or other course work relevant for this position beneficial
- Three-to-five years of increasingly responsible experience in the operation and maintenance of hydroelectric generation, dams, and reservoir facilities; or three-to-five years of experience in skilled industrial plant mechanical maintenance and repair, preferably with some direct experience at a water facility.

SPECIAL REQUIREMENTS

1. Must possess the category of California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Job incumbents must maintain a driving record acceptable to the District and its insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of continuing employment.
2. May work odd shifts, weekends, or holidays and perform standby duties as assigned. Must be available to respond to emergencies which affect the District such as earthquakes, power outages, pipeline breaks, high water events, and chlorine leaks.
3. Must be clean-shaven in order to wear respiratory protection or other safety equipment. Must be able to participate in confined space operations.

ESSENTIAL PHYSICAL ABILITIES

Persons selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position **is** considered "safety sensitive" in nature, the person selected for appointment to this position must pass a pre-employment drug screening which the District also pays for. The medical examination and drug screening is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

- a) sit for extended periods of time;
- b) operate a desktop computer;
- c) operate motor vehicles and other equipment;
- d) operate a variety of hand and electric tools;
- e) perform a variety of physical activities which may involve reaching, bending, squatting, kneeling, crouching, crawling, and climbing, and also manual dexterity;
- f) perform additional physical activities to position or move tools, equipment, and supplies which may involve lifting, and pushing or pulling motions;

- g) wear a respirator and other personal protective equipment;
- h) understand and carry out oral and written directions;
- i) communicate well with others, verbally and in writing;
- j) work cooperatively and get along well with other people;
- k) investigate and solve complex problems which involves ability to perform visual inspections, ability to hear normal versus abnormal noises, ability to view and respond to operational control screens including alarms, and ability to think critically.