



# Hydroelectric Plant Technician 1

**Exam Code: 0PBAM**

**Department:** Department of Water Resources

**Exam Type:** Departmental, Open

**Final Filing Date:** Continuous

## CLASSIFICATION DETAILS

**Hydroelectric Plant Technician 1** – \$6,371.00 - \$9,780.00 per month.

View [the Hydroelectric Plant Technician 1 classification specification](#)

## APPLICATION INSTRUCTIONS

Final Filing Date: Continuous

### Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply for and take this examination.

Once you have taken this examination, you may not retake it for **nine (9) months**.

### How To Apply:

The link to connect to the Training and Experience Evaluation is located farther down on this bulletin in the “Taking the Exam” section.

### Special Testing Arrangements:

If you require assistance or alternative testing arrangements due to a disability, please contact the testing department listed in the Contact Information section of this bulletin.

## MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time jobs, regardless of whether paid or volunteer positions, and inside or outside California state service will count toward experience.

### Hydroelectric Plant Technician 1

Completion of an approved two-year (60 semester or equivalent quarter units) technical curriculum in electrical, electronic, mechanical, or computer-science technology at the community college level, or equivalent. (Electrical, electronic, mechanical, or computer-science work experience in an electrical utility or equivalent industrial or military facility, may be substituted for the required education on the basis of one year of experience being equivalent to 15 semester units.)

## POSITION DESCRIPTION

### Hydroelectric Plant Technician 1

This is the trainee and first working level class in the Hydroelectric Plant Technician series. An incumbent works initially under close supervision and then under general supervision to perform the more routine and basic preventive and corrective maintenance tasks associated with protection schemes, monitoring and control equipment, communications and security systems, metering, sensors, computerized and related equipment used in State Water Project (SWP) generating/pumping plants, switchyards, and water conveyance facilities; performs shop or field work as needed to install, calibrate, maintain, operate, troubleshoot, repair, and test electrical, electronic, and electromechanical equipment and devices; and does other related work.

## EXAMINATION SCOPE

This examination consists of the following components:

**Training and Experience Evaluation** – Weighted 100% of the final score.

The examination will consist solely of a **Training and Experience Evaluation**. To obtain a position on the eligible list, a minimum score of 70% must be received. Applicants will receive their score upon completion of the Training and Experience Evaluation process.

In addition to evaluating applicants' relative knowledge, skills, and ability, as demonstrated by quality and breadth of education and/or experience, emphasis in each exam component will be measuring competitively, relative job demands, each applicant's:

**Knowledge of:**

1. Mathematics, algebra, trigonometry, and Boolean logic to solve electrical and electronic problems.
2. Use of test equipment and diagnostic devices (ex. Oscilloscopes, multi-meters, counters, power system, logic, and network analyzers) to determine, diagnose, and isolate problems or malfunctions.
3. Electrical and electronic theory and its application to solve electrical and electronic system problems.
4. Testing, maintaining, and repairing electrical and electronic equipment.
5. Technical drawings (ex. One line diagrams, schematics, wiring diagrams, logic diagrams).
6. Color code standards for electrical wiring and components used in the manufacture, configuration, and repair of electrical equipment.
7. Instrumentation for measuring flow, level, position, temperature, pressure, speed, and vibration.

**Ability to:**

1. Solve electrical and electronic problems.
2. Use a personal computer for standard office applications and specialized troubleshooting.
3. Work in an environment that requires strict adherence to instructions, standards, and procedures.
4. Follow written and oral instructions for completing work tasks.
5. Determine, diagnose, and isolate problems or malfunctions in order to make necessary repairs.
6. Apply electrical and electronic theory and application to solve electrical and electronic problems and to test, maintain, and repair electrical components, equipment, and systems.
7. Read and interpret technical drawings, documentation, and procedures for testing and repairs, and to interpret test results.
8. Comprehend policies, procedures, orders, rules, and other related written documents/materials to perform the duties of the job.
9. Wire components and equipment following wiring diagrams or schematics.
10. Apply safety and security practices.

## ELIGIBLE LIST INFORMATION

A departmental, open eligible list for the **Hydroelectric Plant Technician 1** classification will be established for:

### Department of Water Resources

The names of **successful** competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires **twelve (12) months** after it is established. Applicants must then retake the examination to reestablish eligibility. Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, or widow or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligible list.

Veterans status is verified by the California Department of Human Resources (CalHR). Information on this program and [the Veterans' Preference Application](#) (Std. form 1093) is available online. Additional information on veteran benefits is available at the Department of Veterans Affairs.

## EXAMINATION INFORMATION

[Preview of the Hydroelectric Plant Technician 1 Training and Experience Evaluation](#)

## PREPARING FOR THE EXAMINATION

**Note: Please be aware that each page of the examination times out at 20 minutes.** It is recommended to preview the examination by clicking the link under "Examination Information."

Here is a list of suggested resources to have available prior to taking the exam.

**Employment History:** Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone numbers of persons listed above.

**Education:** School names and addresses, degrees earned, dates attended, courses taken (verifiable on a transcript), persons or office who can verify education, and phone numbers of persons or offices listed above.

**Training:** Class titles, certifications received, names of persons who can verify your training, and phone numbers of persons listed above.

## TAKING THE EXAMINATION

**We recommend using Chrome, Firefox, or Edge for optimal performance when accessing the examination.**

**[Take the Hydroelectric Plant Technician 1 examination.](#)**

## TESTING DEPARTMENTS

### Department of Water Resources

## CONTACT INFORMATION

If you have any ***administrative*** questions concerning this examination bulletin, including provision of reasonable accommodation for this testing process, please contact:

### Department of Water Resources

**Phone: 916-653-4838**

TTY is a Telecommunications Device for the Deaf, and is reachable only from phones equipped with a TTY Device.

If you have any ***technical*** questions concerning this examination bulletin, please contact:

California Department of Human Resources

Attn: Examination Services

1515 S Street

Sacramento, CA 95811

Phone: 1-866-844-8671

California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

## EQUAL OPPORTUNITY EMPLOYER

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding, and related medical conditions), and sexual orientation.

## DRUG-FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

## GENERAL INFORMATION

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your [CalCareer Account](#).

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their score.

The Department of Water Resources reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all applicants will be notified.

**General Qualifications:** Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgement, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**High School Equivalence:** Equivalence to completion of the 12<sup>th</sup> grade may be demonstrated in any one of the following ways: 1) passing the General Education Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification from the State Department of Education, a local school board, or high school authorities that the competitor is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.