



Utilities Engineer

Open - Continuous Examination

CPUC

California Public Utilities Commission

Exam #: 10UC03

Class Code: 3518

Min. Salary: \$4760/month Max Salary: \$8915/month

THE STATE OF CALIFORNIA IS AN EQUAL OPPORTUNITY EMPLOYER TO ALL, REGARDLESS OF AGE, ANCESTRY, COLOR, DISABILITY (MENTAL AND PHYSICAL), EXERCISING THE RIGHT TO 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.

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 SERVICE.

HOW TO APPLY

You may access the online application at: <http://www.cpuc.ca.gov/PUC/jobs/>

If you have a disability and need special testing arrangements, mark the appropriate box on question 2 of the "Examination and/or Employment Application." We will contact you to make specific arrangements that are convenient for you in advance of the examination.

WHEN MAY APPLICATIONS BE FILED

The testing office accepts applications continuously and will notify and test applicants (see Written Test Dates section below). Do not submit your application to the State Personnel Board.

THE POSITION – General Description

This is an entry, first working, and journey level of professional engineering work within the Public Utilities Commission.

A Utilities Engineer in the Safety and Enforcement Division of the Public Utilities Commission works on either rail crossings or rail transit safety. Engineers inspect and evaluate highway-rail crossings and rail transit systems for compliance; conduct safety oversight by performing diagnostic reviews of crossings, auditing safety practices of transit agencies, and investigating complaints and accidents; and/or develop safety recommendations and regulations involving the design, construction, operation and maintenance of highway-rail crossings and rail transit systems. In addition, an engineer may prepare formal decisions and resolutions, write investigation reports, evaluate complex plans and documents of rail systems, research rail safety and new technology, analyze rail accident data, testify in formal proceedings before the Commission involving the safety of highway-rail crossings and rail transit systems, and does other job-related work as required.

A Utilities Engineer in the Office of Ratepayer Advocates, Energy Division, Communications Division and Water and Audit Division of the Public Utilities Commission, assist in matters relating to gas, electric, communications, hydraulic and sewer system utilities; assist in studies of utility tariff; make file inspections of small utilities or segments of large utilities to determine compliance with Commission standards and regulations; recommend replacement, modification, or addition of utility facilities for adequacy of service; design rate schedules; make rate base calculations, and does other job-related work as required.

Positions are located in San Francisco and Los Angeles. Travel is required for some positions.

Range A: \$4760 - \$5675

This range shall apply to persons who do not meet the criteria for Range B, Range C, or Range D.

Range B: \$5450 - \$6819

This range shall apply to persons who have either:

- 1) One year experience in California State service performing duties equivalent to a Utilities Engineer, Range A; or
- 2) Two years professional engineering experience outside State service with a utility, railroad or transportation company (see class specification for other professional engineering experience); and a Bachelor's Degree in an engineering curriculum accredited by ABET; or
- 3) A Master's or Doctorate degree in engineering from a college or university that has an engineering baccalaureate degree program accredited by the ABET.

Range C: \$6304 - \$7887

This range shall apply to persons who have either:

- 1) Two years experience in State service performing duties equivalent to a Utilities Engineer, Range B; or
- 2) Three years professional engineering experience outside State service with a utility, railroad or transportation company (see class specification for other professional engineering experience); and a Bachelor's Degree in an engineering curriculum accredited by ABET. (Possession of a Master's Degree in Engineering may be substituted for one year of experience whereas possession of a Doctor's Degree in Engineering may be substituted for two years of experience.)

Range D: \$7125 - \$8915

This range shall apply to persons who have:

Possession of a valid certificate of registration as a Professional Engineer issued by the California State Board of Registration for Professional Engineers.

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION - MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements for this examination by the written test date. Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II, "or" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time in Pattern I, and additional experience amounting to 50% of the required time in Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

Either I

Equivalent to graduation from an engineering curriculum accredited by the Accreditation Board for Engineering and Technology (Internet site <http://www.abet.org>). (Registration as a Senior in such a curriculum will admit an applicant to the examination, but he/she must produce evidence of graduation before he/she will be considered eligible for appointment.)

(A degree in Engineering Technology does not meet this requirement.)

Or II

Possession of equivalent qualifications may be demonstrated by graduation from an engineering curriculum which includes the basic engineering courses normally covered in the standard four-year engineering curriculum and possession of a valid Engineer-in-Training certificate.

Or III

Graduation with a Master's Degree in Engineering from a college or university that has an engineering baccalaureate degree program accredited by the Accreditation Board for Engineering and Technology. (Registration in such a curriculum will admit an application to the examination but he/she must produce evidence of graduation before he/she will be considered eligible for appointment.)

EXAMINATION INFORMATION

This is a multiple choice written examination (weighted 100%). In order to obtain a position on the eligible list, a minimum rating of 70% must be attained in the examination. Candidates who do not appear for their scheduled examination will be withdrawn from the examination process.

The PUC reserves the right to modify the selection process as necessary to conform to administrative or business necessity.

WRITTEN TEST DATE – San Francisco and Los Angeles only

The written test will be scheduled on the 3rd Monday of every other month, starting on March, May, July, September, November and January. If the 3rd Monday falls on a holiday, the written test will be scheduled on the following business day. In order to be scheduled for the examination, your application must be received 2 weeks (14 calendar days) prior to the examination date.

WRITTEN EXAMINATION – WEIGHTED 100%

A. Knowledge of:

1. Basic engineering fundamentals and terminology (mechanical, electrical, etc.).
2. Basic mathematics and statistics.
3. Basic accounting and finance.

B. Ability to:

1. Analyze data and perform research work to locate and identify problems.
2. Propose solutions by developing and evaluating possible actions and alternatives to address problems.
3. Pay close attention to detail and analyze situations accurately based on what you observe (e.g., during a site inspection).
4. Conduct simple analysis of data including means and sums.
5. Reason logically and creatively, while utilizing a variety of analytical approaches to resolve regulatory problems.
6. Utilize and conduct simple statistical analysis of data (e.g., in order to complete appropriate sales forecasting).
7. Analyze and understand large amounts of data and draw conclusions (e.g., root cause analysis)
8. Read and understand non-technical material (i.e., administrative memos, letters, forms, etc.).
9. Read and understand technical material (e.g., testimony supporting formal utility filings, utility maintenance and operation procedures, advice letters from utilities, etc.).
10. Comprehend and interpret engineering documents (i.e., reports, blueprints, applications, etc.).

ELIGIBLE LIST INFORMATION

A departmental eligible list will be established for the Commission. Names of successful candidates will be merged onto the list in order of final scores, regardless of date. A candidate may only test once in a 12 month period. Eligibility expires 12 months after it is established; candidates may then retest to reestablish eligibility.

Veterans' Preference: Will be awarded in this examination, pursuant to Government Code Section 18973.1, effective January 1, 2014, as follows:

1. Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for veterans' preference.
2. An entrance examination is defined, under the law, as any open competitive examination.
3. Veterans' Preference is not granted once a person achieves permanent civil service status.

GENERAL INFORMATION

Applications are available at <http://www.cpuc.ca.gov/PUC/jobs/onlineemp.htm>, State Personnel Board offices, local offices of the California Public Utilities Commission and the testing department on this job bulletin.

If meeting the requirements stated above, you may take this competitive examination. Possession of the entrance requirements does not ensure a place on the eligible list. All candidates passing the examination will be ranked according to scores.

The California Public Utilities Commission reserves the right to revise the examination plan to better meet the needs and service of the Commission. Such revision will be in accordance with civil service law and rules and all competitors will be notified.

Examination Locations: Examinations are typically scheduled in San Francisco. However, there are instances when examinations are given in such places in California as the number of candidates and conditions warrant.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class.

Interview Scope: If an interview is conducted, in addition to the scope described on this bulletin, the panel may consider education, experience, personal development, personal traits, and fitness. In appraising experience, more weight will be given to the breadth of pertinent experience and evidence of the candidate's ability to accept and fulfill increasing responsibilities than to the length of the candidate's experience. Evaluation of a candidate's personal development will include consideration of own training needs; plans for self-development; and the progress the candidate has made towards self-development.

Veterans' Preference:

HOW TO APPLY FOR VETERANS' PREFERENCE

The California Department of Human Resources (CalHR) has information on how to apply for Veterans' Preference on their website at www.jobs.ca.gov and on the Application for Veterans' Preference form ([CalHR 1093](#)). Additional information is also available at the Department of Veterans Affairs website at www.cdva.ca.gov.