

Utilities Engineer

Exam Code: 10UC03 Class Code: 3518

Department: California Public Utilities Commission

Exam Type: Departmental Open **Final Filing Date:** Continuous

CLASSIFICATION DETAILS

Utilities Engineer

\$5,540.00 - \$10,377 per month.

View the Utilities Engineer specification

APPLICATION INSTRUCTIONS

Final Filing Date: Continuous

The testing office accepts applications on a continuous basis. Applications received after the cut-off date will not be processed until the next administration.

Application Cut-off Dates:

June 8, 2020 July 6, 2020 September 7, 2020 November 2, 2020

Do not submit your Examination/Employment Application (Std. 678) to the California Department of Human Resources (CalHR).

WHO SHOULD APPLY:

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

Candidates may only test once during a 12-month period. Eligibility expires 12 months after its established; candidates may then reapply to retest, to establish eligibility.

HOW TO APPLY:

To apply for this exam, you must submit an Examination/Employment Application (Std. 678) to the California Public Utilities Commission (CPUC) by the final filing date. If you have a CalCareer account with the California Department of Human Resources (CalHR) (https://www.calcareers.ca.gov/) you can login and download a copy of your up-to-date Std. 678 Examination/Employment Application. Alternatively, you may access the application template here: https://jobs.ca.gov/pdf/std678.pdf.

ELECTRONIC SUBMISSION: You may submit your Examination/Employment Application (Std. 678) via email to: pucexams@cpuc.ca.gov. Please be sure to sign your application before scanning and sending; or

HARDCOPY SUBMISSION: You may submit a hardcopy of your Examination/Employment Application (Std. 678) by mail to:

California Public Utilities Commission Human Resources Division Attention: Selection Unit – Utilities Engineer 505 Van Ness Ave, Room 3008 San Francisco, CA 94102

APPLY IN PERSON: You may apply in person by submitting a hardcopy of your Examination/Employment Application (Std. 678) to:

California Public Utilities Commission Human Resources Division Attention: Selection Unit – Utilities Engineer 505 Van Ness Ave, Room 3008 San Francisco, CA 94102

Do not submit your application to CalHR.

Special Testing Arrangements:

If you require assistance or alternative testing arrangements due to a disability, mark the appropriate box on question 10 of the Examination/Employment Application. We will contact you to make arrangements that are convenient for you prior to the examination.

MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements for this examination by the cut-off dates established by the testing office.

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 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 (ABET). (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.)

POSITION DESCRIPTION

Utilities Engineer

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 Public Advocates Office, Energy Division, Communications Division, and Water 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, Sacramento, and Los Angeles.

Travel is required for some positions.

Range A: \$5,540 - \$6,606

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

Range B: \$6,344 - \$7,937

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**
- Two years professional engineering experience outside State service with a utility, railroad or transportation company (see classification specification for the other professional engineering experience); and a Bachelor's Degree in an engineering curriculum accredited by ABET; or

3. A Masters or Doctorate degree in engineering from a college or university that has an engineering baccalaureate degree program accredited by ABET.

Range C: \$7,337 - \$9,180

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: \$8,293 - \$10,377

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.

EXAMINATION SCOPE

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.

Written examination locations: Los Angeles, Sacramento, and San Francisco.

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

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 and abilities.

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, blueprint applications, etc.)

ELIGIBLE LIST INFORMATION

A list of eligible candidates will be established for the California Public Utilities Commission. Names of successful candidates will be merged onto the list in the order of final scores regardless of dates. Eligibility expires 12 months after it is established. Candidates must then reapply to retest, to reestablish eligibility. Candidates may only test once during a 12-month period.

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.

TESTING DEPARTMENTS

California Public Utilities Commission

CONTACT INFORMATION

If you have any questions regarding this examination bulletin, please contact:

California Public Utilities Commission

Attn: Human Resources Division - Selection Unit

505 Van Ness Ave, Room 3008

San Francisco, CA 94102 Phone: 1-800-555-7809

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

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

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 workplace. 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 <u>CalCareer Account.</u>

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 **California Public Utilities Commission** 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.

For an examination with a written feature, it is the candidate's responsibility to contact the California Public Utilities Commission three days prior to the written test date if he/she has not received his/her notice of appointment.

For an examination without a written feature, it is the candidate's responsibility to contact the California Public Utilities Commission three weeks after the final filing date if he/she has not received his/her notice.

If a candidate's notice of oral interview or performance test fails to reach him/her 3 days prior to their scheduled appointment due to a verified postal error, he/she will be rescheduled upon written request.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. However, locations of interviews or performance evaluations may be limited or extended as conditions warrant.

Applications are available at the State Personnel Board office, local offices of the Employment Development Department, and in the Human Resources Office of the California Public Utilities Commission.

If you meet the requirements stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

Candidates needing special testing arrangements due to a disability must mark the appropriate box on the application and/or contact the testing department.

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 12th 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 form 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.