



JOB OPPORTUNITY BULLETIN

CLASSIFICATION: **UTILITIES ENGINEER**
Training and Development Assignments may be considered.

TENURE: **PERMANENT**

TIME BASE: **FULL TIME**

SALARY: **RANGE A - \$5,327 - \$6,352**

RANGE B - \$6,100 - \$7,632

RANGE C - \$7,055 - \$8,827

RANGE D - \$7,974 - \$9,978

LOCATION: **DOWNTOWN SACRAMENTO, CA**
ENERGY RESEARCH AND DEVELOPMENT DIVISION

FINAL FILING DATE: **UNTIL FILLED**

DUTIES/RESPONSIBILITIES:

Under the supervisor's general direction in the Energy Efficiency Research Office's Building Efficiency Research Unit, the incumbent performs mechanical, electrical, and civil engineering work in the design, construction, operation and maintenance of electrical or natural gas building efficiency research projects; conducts investigations and prepares reports involving engineering economics which includes studies of capital costs, financial structure, depreciation, physical plant inspections, valuations, revenues, and expenses. Develop, implement, and perform engineering and technical analysis to support new and existing research agreements. The incumbent provides analysis in support of research and development, demonstration and deployment of energy and greenhouse gas reducing technologies funded by the Energy Commission with the goal of determining and documenting technical and economic feasibility, energy savings and other benefits. Contribute engineering skills when reviewing and/or preparing engineering and environmental studies and evaluations. The incumbent should be knowledgeable of multiple aspects of engineering such as energy/mass balances, thermodynamics, fluid mechanics, combustion, strength/properties of materials, statistical analyses, testing of equipment, economics and interpretation of technical codes and standards.

- Review and/or prepare engineering and economic studies or evaluations of technologies, practices and designs related to buildings, industrial, food processing, water and energy systems. Evaluate or perform calculations to determine estimated and actual energy savings, greenhouse gas emission reductions, and project costs. Conduct tariff and cost of service analyses for the project. Conduct detailed engineering assessments and analyses of new, innovative and emerging energy efficiency technologies to determine impact in reducing energy use and greenhouse gas emissions, and in increasing reliability and operating efficiency and benefits to the electric grid and/or natural gas system. Identify and recommend RD&D activities associated with the buildings system. Perform complex engineering evaluations such as: engineering economics, system reliability, resource adequacy, quality of service, heat transfer, mechanical methods of power and material transmission, thermodynamics, pump analysis, mass and energy balances, environmental controls, material selection and specifications, performance and suitability of components, efficiency and economics of engineering design options, cost, and performance, power electronics, transmission and distribution equipment and power flow, energy efficiency, heating and air conditioning (HVAC), furnaces, steam boilers,

engines, gas turbines, combined heat and power, conversion technologies and processes, and heat and power, conversion technologies and processes, and other technologies, components, and systems. The incumbent will read and interpret plans, drawings, specifications and regulations governing energy and water equipment and systems, as it relates to the installation of GHG reduction equipment. The incumbent also provides technical assistance to other staff in analyzing engineering problems.

- Serve as the project manager or may act as a technical lead over other technical personnel on complex engineering projects to support adoption and demonstration of cutting-edge and emerging technologies and impacts to the energy system, including interactions to increase grid flexibility and decarbonization of services in buildings, industrial, agriculture, water and food processing sectors. Evaluate performance, provide quality control/assurance, review interim research products (e.g. results of surveys, test results, design drawings, etc.), evaluate technical changes to project budget/scope, and review/approve final products from completed projects.

For the full duty statement, go to: <https://www.energy.ca.gov/careers/jobs.php>.

DESIRABLE EXPERIENCE/QUALIFICATIONS: The successful applicant should have

- Demonstrated ability to conduct engineering, economic, and policy research and analysis, identify issues, and recommend effective courses of action.
- Demonstrated experience analyzing data and developing conclusions, including the use of spreadsheets and other quantitative tools for data analysis and graphical representation of results.
- Excellent oral skills and ability to effectively communicate in written form (i.e., technical reports, memos, letters, and comments).
- Demonstrated ability to handle multiple assignments with accuracy, to prioritize and meet deadlines, and to work well in a team environment with the ability to coordinate interdisciplinary projects.
- Demonstrated ability to establish and maintain cooperative and positive working relationships with others, both inside and outside the agency.
- Ability to communicate complicated information in a simple, consumer-friendly manner.

WHO MAY APPLY: Interested applicants must submit a completed Standard State Application (Form STD. 678) with an original signature to the contact/address listed below. Electronic applications will also be accepted. You must clearly indicate the basis of your eligibility (i.e. list, transfer, SROA/Surplus, reinstatement, etc.) including the following, RPA# 310-065 and Position #535-310-3518-001, in the "Explanation Section" of the STD 678. Resumes are welcome but do not take the place of the completed State Application STD 678. Applications will be screened for experience and only the most qualified will be contacted for an interview. NOTE: Failure to comply with the filing instructions and incomplete applications received will not be considered.

[OPTIONAL] Miscellaneous statements here.

APPLICANTS MUST SUBMIT A COMPLETED STANDARD STATE APPLICATION (FORM STD. 678) TO:

SUBMIT APPLICATIONS TO:

Personnel Services Office
Attn: **RPA #310-065**
1516 9th Street, MS-3
Sacramento, CA 95814
Phone: 916-654-4309

California Relay (Telephone) Service for
the Deaf or Hearing-Impaired
From hTDD Phones: 1-800-735-2929
From Voice Phones: 1-800-735-2922
personnelervices@energy.ca.gov