

Energy Commission Specialist 1 and 2 (Technology Evaluation and Development)

Exam Code: 7PB26

Department: State of California **Exam Type:** Departmental, Open **Final Filing Date:** Continuous

CLASSIFICATION DETAILS

Energy Commission Specialist 1 – \$6,050.00 - \$7,519.00 per month Energy Commission Specialist 2 – \$6,645.00 - \$8,259.00 per month

View the Energy Commission Specialist 1 and 2 (Technology Evaluation and Development) 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 **twelve (12)** 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 special testing arrangements due to a verified disability or medical condition, please contact:

California Department of Human Resources

CalCareer Service Center 1810 16th Street Sacramento, CA 95814

Phone: (866) 844-8671

Email: CalCareer@CalHR.CA.GOV

California Relay Service: 7-1-1 (TTY and voice)

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

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.

Energy Commission Specialist 1 (Technology and Evaluation and Development) Either 1

In the California state service, one year of experience performing technology evaluation and development duties in <u>areas related to</u> energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Associate Energy Specialist.

Or 2

Four years of responsible technical experience in one or more of the areas described in Pattern I above, including three years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience).

(Experience in the California state service applied toward this pattern must include at least one year performing the duties in a class with a level of responsibility equivalent to Associate Energy Specialist.)

AND

Education: The following education is required when non-California state service experience is used to qualify at any level. Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

Energy Commission Specialist 2 (Technology Evaluation and Development) Either 1

In the California state service, one year of experience performing technology evaluation and development duties in areas related to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Energy Commission Specialist I.

Or 2

Two years of experience in the California state service performing technology evaluation and development duties in areas related to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Associate Energy Specialist.

Or 3

Five years of responsible technical experience in one or more of the areas described in Pattern I above, including four years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience.)

(Experience in the California state service applied toward this pattern must include at least one year performing the duties in a class with a level of responsibility equivalent to ECS I).

AND

Education: The following education is required when non-California state service experience is used to qualify at any level. Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

POSITION DESCRIPTION

Energy Commission Specialist 1 (Technology Evaluation and Development)

Specialist 1 positions are characterized by incumbents independently performing more complex, sensitive and responsible energy-related work which requires, on a regular basis, a high level of knowledge, skill and ability which is demonstrably above the journey level.

Incumbents in this class will usually possess technical expertise in one or more energy-related fields. Incumbents perform a broad range of duties within the program specialty. Incumbents may exercise some lead responsibility as Project Managers. Incumbents may be responsible for minor Commission reports and may lead other Energy Commission Specialists 1 in carrying out project responsibility.

Energy Commission Specialist 2 (Technology Evaluation and Development)

Specialist 2 positions are identified by top Commission management as requiring the service of the most highly skilled practitioners who serve as prime resources and innovators in energy-related subjects which are the most sensitive and complex due to the rapid development in the subject area, extremely high legislative and media attention and multi-state impact. Incumbents provide expert guidance on highly complex and technical problems; and provide expert consultation services within their area of expertise.

Incumbents may also serve as project leaders to address broad national issues such as global warming. Such major projects are characterized by their multidisciplinary scope and interstate impact.

EXAMINATION SCOPE

This examination consists of the following components:

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

The examination will consists 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:

Energy Commission Specialist 1 and 2 - Knowledge of:

- 1. A wide range of energy technologies and associated deployment and use issues
- 2. Energy supply and demand forecasts and analytic methodologies, energy policy issues affecting or resulting from energy technology development, and energy project management techniques
- California Public Resource Code pertaining to energy resources conservation and development
- 4. Principles of physical sciences and engineering involved in energy resource development, conversion, distribution, and conservation
- 5. Principles of econometric and end-use energy demand forecasting
- 6. Energy sources and use within the California economy
- 7. Principles of engineering economics, financial analysis, and economic theory as it pertains to energy supply and demand
- 8. Energy technology costs and cost-accounting methods
- 9. Recent research and development projects related to the use of petroleum, natural gas, biomass and other synthetic fuels
- 10. Energy technology environmental impacts, including emissions, waste streams, volumes and characteristics
- 11. Energy technology public health impacts, air quality impacts and risk analysis
- 12. General provisions of social and economic implications of geothermal, solar, wind and other renewable energy development, technology and fuel demonstrations, resource planning and facility construction
- 13. Recent research and development projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies
- 14. Federal and State energy policy
- 15. Decision theory, probabilistic risk assessment, and techniques of comparative evaluation, and Federal, State and local government, utilities and private agencies in energy research and regulation.

Energy Commission Specialist 2 Only - Knowledge of:

- 1. A variety of analytical and research techniques to resolve complex and policy sensitive issues and technical problems
- 2. Significant trends and issues reported in the energy literature
- 3. Theory and practice of utility planning and regulation, in general, and as implemented in California
- 4. Energy efficiency, conservation, planning, forecasting and research methods including problem definition, data acquisition, and analytical techniques

5. Other Federal, State and local energy related environmental goals, policies and organizations.

Energy Commission Specialist 1 and 2 - Ability to:

- Reason logically and creatively, evaluate and apply a variety of analytical and research methods for the purpose of systematic, critical, and thorough analysis of energy problems or prospective issues leading to formulation, testing, or revision of State and/or Federal energy policies
- 2. Utilize available computer systems for data base and/or computational applications
- 3. Manage contracts
- 4. Analyze energy data and present ideas and information effectively both orally and in writing
- 5. Communicate in both written and oral formats
- 6. Prepare and give testimony in planning and regulatory proceedings
- 7. Develop and use complex computer programs and analytic models
- 8. Develop and evaluate fuel alternatives
- 9. Gain and maintain the confidence and cooperation of those contacted during the course of work
- 10. Evaluate and quantify the effect of research, development and demonstration programs on energy systems
- 11. Analyze situations accurately and take effective actions, and act independently within the guidelines set forth by the Commission
- 12. Present ideas and analysis cogently and effectively
- 13. Consult with and advise other staff, management, Commissioners, or others on the relative merits of specific energy technologies and the impact of various energy policies.

Energy Commission Specialist 2 Only - Ability to:

- 1. Coordinate the complex technical work of others, act as a team or conference leader to analyze the more technical and complex situations accurately and take effective action.
- 2. Establish and maintain project priorities.
- Testify as subject matter expert (geothermal, solar, wind and other renewable energy development, technology and fuel demonstrations, recent research and development, projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies) before the Commission and other groups.
- 4. Serve as the Commission's top adviser in such areas.
- 5. Effectively employ computer techniques for problems solving.

6. Consult with and advise Office Managers, Division Administrators, Commissioners and other interested members of State energy community on a wide variety of energy forecasting, modeling and fuel-related issues and topics.

ELIGIBLE LIST INFORMATION

A servicewide, open eligible list for the **Energy Commission Specialist 1 and 2 (Technology Evaluation and Development)** classification will be established for the State of California (all State of California departments, statewide).

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.

Career Credits are not granted for examination(s) administered on an Open basis or Promotional basis.

EXAMINATION INFORMATION

<u>Preview of the Energy Commission Specialist 1 and 2 (Technology Evaluation and Development) Training and Experience Evaluation</u>

PREPARING FOR THE EXAMINATION

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

<u>Take the Energy Commission Specialist 1 and 2 (Technology Evaluation and Development) examination</u>

TESTING DEPARTMENTS

State of California (all State of California departments)

CONTACT INFORMATION

California Department of Human Resources CalCareer Service Center 1810 16th Street Sacramento, CA 95814

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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 <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 Department of Human Resources (CalHR) 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 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.