



STATE OF CALIFORNIA

# DUTY STATEMENT

CEC-004 (Revised 7/2021)

**Classification(s):** Engineering Geologist

**Working Title:** Engineering Geologist

**Position Number:** 535-770-3756-001

**Division/Office:** Siting, Transmission and Environmental Protection Division/Engineering

**Collective Bargaining Identifier (CBID):** R09

**Work Week Group (WWG):** 2

**Effective Date:** August 11, 2021

**Conflict of Interest (COI):**  Yes  No

If yes, this position is responsible for making or participating in the making of governmental decisions that may potentially have a material effect on personal financial interests. The appointee is required to complete Form 700 within 30 days of appointment, which identifies pertinent personal financial information.

## Job Description

Under the general direction of the Senior Engineering Geologist, of the GeoSciences Unit in the Engineering Office, the incumbent reviews and evaluates whether there would be impacts to geologic or paleontologic resources from the construction, operation, and maintenance of energy facilities and power plants. The incumbent also assesses whether there are geologic hazards present that have the potential to impact human health and the environment. The incumbent reviews project sites that may have issues involving sensitive paleontologic resources, recognized and documented geologic resources, and faulting, seismicity, and related phenomena that may impact project construction and operation. The incumbent responds to geologic and paleontologic resources, compliance and geologic hazards issues regarding power plant operations; and conducts investigations to determine if any violations of the program's regulations, the Energy Commission's conditions of certification, or the California Environmental Quality Act (CEQA) have occurred.

The incumbent also acts as a technical expert in geologic and paleontologic resources, and geologic hazards studies, and participates in analytical evaluations that contribute to Energy Commission's policy and planning responsibilities. The incumbent will be the Energy Commission's seismic expert and representative on the multi-state agency Independent Peer Review Panel (IPRP) overseeing seismic work conducted for California's nuclear power plants.

## Essential Duties

- 30% Prepare Staff Assessments, that are equivalent to CEQA documents, of proposed power plant projects and related facilities. Evaluate proposed project sites for presence of geologic and paleontologic resources and identify what measures may be necessary for impact mitigations. Review and evaluate the technical aspects of power plant construction, operation, and maintenance and how geologic and paleontologic resources may be affected. Review and evaluate whether geologic hazards are present. Provide assessments of faulting and seismicity that could impact the intended use of the site for power plant construction and operation. Identify and evaluate potential impacts from geologic hazards such as liquefaction, dynamic compaction, settlement, soil expansion, lateral spreading, collage potential, tsunami, seiche, and sea level rise.
- 20% Respond to geologic and paleontologic resources and geologic hazards issues regarding power plant construction, operation, and maintenance and conducts investigations to determine if any violations of the program's regulations, Energy Commission's conditions of certification, or CEQA have occurred. Complete site visits of power plants and related facilities to monitor and ensure compliance with Energy Commission conditions of certification. Perform on-site inspections and conduct field investigations to ensure that potential impacts to human health and the environment are avoided, prevented, or reduced below significant thresholds. Assess compliance reports and studies completed by project owners for appropriateness and whether they have followed sound scientific, technical, and regulatory principles. Responsible for reviewing and assessing project changes, modifications, and major project amendments.
- 15% Review applications for certification for new power plants and petitions to amend licenses for existing power plants and other supporting documents and reports, such as geotechnical investigations, mineral resource studies, paleontologic resource plans and maps, applying the knowledge of 1) fault mechanics and seismic potential; 2) structural geology; 3) Alquist-Priolo fault zoning and project siting regulations; 4) Society of Vertebrate Paleontology and Bureau of Land Management guidance for assessment of paleontologic resources; 5) statewide guidance, such as the California Coastal Commission, on the effects of sea level rise, storm surge, tsunami, seiche, and related phenomena; and 6) local or state mineral resource maps and zoning. The engineering geologist will utilize appropriate geologic, scientific, and technical principles, practices, performance standards, regulations, and guidance in the review and development of the complex work products required for power plant construction, operation, and maintenance.
- 15% Participate in meetings, workshops and hearings as the Energy Commission's representative on the multi- state agency Independent Peer Review Panel (IPRP). Provide technical expertise in tectonics, the identification of active faulting, seismicity, seismic site response, ground motion prediction equations, field investigative techniques, data collection, data analysis, and assist with IPRP report preparation regarding the interpretation of the seismic setting of California's nuclear power plants. Attend and participate in public meetings to resolve differences in scopes and parameters of seismic studies as presented by project owners and evaluated by the IPRP. Review and comment

on resulting reports. Attend meetings, workshops, and hearings; provide written and oral testimony at evidentiary hearings; coordinate analyses and compliance matters with local, state, and federal agencies. Prepare and deliver presentations at assorted internal and external meetings regarding geologic and paleontologic resources and geologic hazards. Review and comment on proposed legislation.

- 10% Complete scientific studies and analytical evaluations of energy facilities, hydroelectric facilities, refineries, pipelines, power plants, transmission lines, and related facilities for the Energy Commission's policy and planning responsibilities. The Energy Commission is responsible for developing recommendations for statewide energy policy for the Governor and State Legislature and the incumbent will be responsible for contributing to these statewide energy policy initiatives.
- 5% Conduct technical reviews of paleontologic resource recovery and management plans. Conduct statistical and economic analysis of alternative paleontologic resource management and recovery methods, and site assessment and improvement methods for geologic hazards. Maintain databases that track paleontologic and geologic resource and geologic hazard, and other related data fields related to power plants. Enter events and assignments relating to power plants into a database.

### **Marginal Duties**

- 5% Perform other duties as required, consistent with the specifications of the classification.

### **Working Conditions**

The California Energy Commission is primarily a telework environment. Limited-in person attendance and occasional travel may be required based on the needs of the division. Regular and consistent attendance is essential to the successful performance in this position. The Energy Commission encourages a hybrid workplace model that is designed to support a distributed workforce of both office-based and remote-centric workers.

### **Diversity and Inclusion Statement**

As a State agency serving all Californians, the California Energy Commission is committed to being an organization that embodies diversity, equity, and inclusion. The Energy Commission plays an active and meaningful role in creating an environment that enables each employee to thrive.

**Employee's Acknowledgement:** I certify that I am able to perform, with or without the assistance of a reasonable accommodation, the essential duties of this position.

**Employee's Name (Print):** \_\_\_\_\_

**Employee's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Supervisor's Acknowledgment:** I certify this duty statement represents a current and accurate description of the essential functions of this position. I have discussed the duties of this position with and provided the above-named employee a copy of this duty statement.

**Supervisor's Name (Print):** Geoff Lesh

**Supervisor's Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_