Classification: Mechanical Engineer	**Position No.** 770-3583-010
CBID: R09	**Office:** Engineering
Date Prepared: June 23, 2017	**Division:** Siting, Transmission and Environmental Protection
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL	

POSITION DESCRIPTION: Under the supervision of the Engineering Office Supervising Mechanical Engineer and the technical direction of a Senior Mechanical Engineer, the Mechanical Engineer independently performs mechanical engineering, facility design, power plant efficiency and reliability, noise and vibration, hazardous materials and waste management, and worker safety and fire protection analyses involved in the planning, siting, design, construction, and operation of power generation plants and related facilities. Depending on training and experience, the incumbent will advance from entry level to average difficulty mechanical engineering-related analyses, and perform other related work. The incumbent may function as a member or a leader of an interdisciplinary team, or coordinate the efforts of representatives of various governmental agencies.

WORKING CONDITIONS: The work is performed primarily in an office, conference room, and/or hearing room environment and may require standing and walking as well as sitting for long periods of time. The work area is well lighted, ventilation is adequate, and the noise level may be high. Some travel is required to attend offsite meetings or to participate in workshops, hearings, and outdoor power plant site visits and inspections. Additional hours beyond an eight-hour workday or forty-hour workweek may be required.

DUTIES AND RESPONSIBILITIES: While performing the duties described below, the incumbent will be required to work independently and/or in a team environment utilizing a personal computer and appropriate Commission software such as word processing, electronic mail and Internet; and to participate in and lead meetings with other staff and with other agencies. The incumbent will:

30% Prepare analyses of facility design code compliance, hazardous materials and waste management methods, worker safety and fire protection, noise and vibration impacts, mechanical equipment, pressure vessels, tanks, piping, power plant efficiency, and power plant reliability aspects of proposed and existing power generation plants and related facilities. The analyses are in the form of published staff assessments and written and oral technical testimony, which are presented at Commission hearings and discussed at public workshops. The analyses include evaluating facility design; potential impacts and appropriate mitigation measures; and determining the ability of the facility to comply with applicable laws, ordinances, regulations, and standards. (E)

20% Conduct investigations of incidents and accidents at, and inspections of, power plants and ancillary facilities, and prepare reports and recommendations to ensure that proposed facilities are properly constructed and operated in accordance with Energy Commission certification requirements. Monitor construction and operation of licensed facilities to assure their conformance with licensing requirements. (E)

10% Develop compliance monitoring requirements and verifications related to noise and vibration, and facility design to ensure that proposed facilities are properly constructed and operated in accordance with Energy Commission certification requirements. Monitor construction and operation of licensed facilities to assure their conformance with licensing requirements. (E)

10% Review and evaluate the mechanical engineering and related aspects of hazardous materials and waste management technologies and work safety and fire protection as applied to thermal power plants and related facilities. This may include the evaluation of system and equipment design, performance and reliability, as well as alternatives to the proposed facility. (E)

10% Evaluate the efficiency and reliability implications of energy generation, supply, and end use strategies as input to energy policy development. (E)

10% Coordinate with other environmental, regulatory, and administrative agencies, universities, business organizations, and special interest groups to assure their input into Energy Commission or interagency programs. (E)

5% Evaluate existing and proposed governmental laws, ordinances, regulations, standards, and policies as they pertain to power plant design. (E)

5% Perform other duties as required, consistent with the specifications of the classification. (M)

SIGNATURES	
I CERTIFY THAT I AM ABLE TO PERFORM, WITH OR WITHOUT THE ASSISTANCE OF A REASONABLE ACCOMMODATION, THE ESSENTIAL JOB DUTIES OF THIS POSITION	
_____	_____
XXXX XXXXX **Date**	**Matthew Layton** **Date**
Employee	**Supervisor**