STATE OF CALIFORNIA
DUTY STATEMENT
CEC-004 (Revised 2/2022)

Classification(s): Associate Electrical Engineer
Working Title: Associate Electrical Engineer
Position Number: 535-330-3603-950
Division/Branch: Energy Research & Development/Energy Systems Research
Collective Bargaining Identifier (CBID): R09
Work Week Group (WWG): 2
Effective Date: August 2022
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 direction of the Energy Resources Specialist III (Supervisory) in the Energy Systems Research Branch (ESRB), the Associate Electrical Engineer serves as a technical member of the Long Duration Energy Storage (LDES) research team to evaluate, select, deploy, and monitor the installation and performance of a series of LDES emerging technologies throughout the state.

The incumbent designs and prepares difficult electrical engineering work in the evaluation, design, construction, operation, and maintenance of emerging energy storage technology systems designed to improve the operations of the California utility grid or to assist in the integration of higher concentrations of renewable generation and distributed energy resources. Provides technical input and/or recommendations on the capabilities of LDES technologies, including but not limited to advanced chemistry batteries, flow batteries, mechanical energy storage technologies, thermal energy storage systems, gravity-based energy storage, compressed air energy storage technologies, and pumped hydroelectric systems. Provides advice to the ESRB team, the leadership of the Energy Research & Development Division (ERDD), Commissioners, other state agency executives and staff, and key personnel from the academic and industrial LDES community.
**Essential Duties**

**40%** Prepares technical and electrical engineering assessments and reviews of new and emerging electrical technologies to help achieve California’s clean energy goals. Reads, analyzes, and approves the more difficult plans, drawings, specifications, and other technical information for research projects, including but not limited to, clean-energy microgrids, renewable generation, emerging energy storage technology, vehicle-grid integration, distributed energy resources, and gas infrastructure safety and integrity. Conducts the more difficult engineering analysis on the performance of emerging and fielded energy storage technologies to assess overall performance and safety. Performs electrical engineering evaluations and/or reviews of the electrical system designs, material science assessments, thermal efficiency assessments, and other technical results to ensure the electrical systems perform as expected based on the approved design drawings and engineering specifications. Provides technical assistance to staff in analyzing engineering problems and in the preparation of integrated engineering studies, written reports, and technical assessments. Assists with the synthesis of research results for diverse technical and non-technical audiences, including the Commissioners, Governor’s Office, Legislature, California Public Utilities Commission and other state agencies, and the public. Develops materials, including presentations and written reports. Participates in public forums to describe the team’s research focus. May present to international delegations on research being conducted in California on emerging technologies.

**35%** Performs agreement management activities for projects with difficult electrical engineering tasks from research grant negotiation through close out. Works with grant recipients to prepare agreement documents, including negotiating final scope of work, schedule, and funding allocations. Establishes and maintains technical and business relationships with grant recipients and relevant project stakeholders throughout the project. Provides guidance as needed on CEC expectations for grant performance. Monitors progress and verifies performance to grant objectives. Conducts field surveys, site visits, and inspections of the electrical systems that are part of ERDD-funded demonstrations to ensure field systems comply with grant and other requirements. Conducts technical reviews of project deliverables. Verifies appropriateness of all grant charges in invoices against work performed. Works with grant recipient to identify solutions to technical and contractual research challenges, leveraging the expertise of Technical Advisory Committees. Briefs management on the status of the project. Initiates and approves grant amendments with leadership. As required, provides instruction, assistance, and makes technical decisions on all aspect of staff project management activities.

**10%** Completes difficult market analysis to identify the most pressing technological research needs by end use customers and the maturity levels of new technologies. As required, leads the development of grant funding opportunities to address the gaps identified. As required, leads proposal scoring committees. Analyzes proposals and provides direction to ensure projects address the solicitation criteria including, addressing market needs, advancing science or technology to market adoption, meeting goals/objectives in the grant funding opportunity, and providing a skilled team that can perform the technical tasks within budget/schedule. Provides direction and makes technical decisions on written findings of such evaluations for use by a scoring committee.
10% Oversees the finalization of project reports, fact sheets, annual reports, and other documents to disseminate research results and lessons learned to technology end users and others with a focus on transferring information that provides public benefits to California and meets the state's energy policies and goals.

Marginal Duties

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

Working Conditions

The California Energy Commission offers a hybrid workplace model that is designed to support a distributed workforce of both office-based and remote-centric workers that relies on a high level of telework. Limited-in person attendance and occasional travel may be required based on the needs of the division. Regular and consistent attendance - whether office-based or remote-centric - is essential to the successful performance in this position. This position is remote-centered, which means the incumbent works 50 percent or more of their time monthly from an alternate work location (i.e., teleworking).

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.

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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): __________________________

Supervisor’s Signature: ____________________________ Date: ________________