DUTY STATEMENT

Classification(s): Electric Generation System Specialist I

Working Title: Industrial Decarbonization Specialist

Position Number: 535-310-4841-007

Division/Office: Energy Research & Development /Energy Efficiency Research

Collective Bargaining Identifier (CBID): R09

Work Week Group (WWG): 2

Effective Date: May 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), the incumbent serves as part of an interdisciplinary and/or interdivisional team to plan and identify and implement energy research, development and demonstration (RD&D) projects associated with the industrial, agriculture, and water (IAW) sectors. At the full journeyperson level, the incumbent performs time-critical and subject matter-critical technical or market analyses to support and manage complex energy RD&D projects and consults with experts in the field. The incumbent researches, analyzes, and evaluates improvements and advances in equipment, power systems (such as turbine and microgrid-related technologies), alternative energy systems to support electrification, and load reduction models and strategies. Duties will include developing, preparing, and implementing engineering and economic studies of advanced electrification and grid flexible technologies and impacts on the IAW sectors and making recommendations to the Commission on policies and funding to increase decarbonization of these sectors.

Essential Duties

40% Technology Assessment. Performs analysis, research, design, and evaluation of state-of-the-art and emerging industrial, agricultural, and water technologies and/or systems focused on energy efficiency, grid stability, peak load reduction, and reduction of greenhouse gas emissions, including: lead staff analysis and evaluation of electrification
technologies, such as microwave, ohmic, infrared and induction, energy generation, energy storage, and integrated energy management systems; develop engineering and economic recommendations of potential decarbonization technologies and strategies, such as on-site alternative fuel production (e.g., hydrogen) using renewable or other energy generation sources and other customer-side of the meter options; analyze advanced technologies and strategies for industrial process improvements; develop and analyze grid impacts of electrification strategies and technologies on the state’s electric grid; identify energy research needs, benefits, and impacts from novel energy efficiency and decarbonization strategies; consult with researchers and stakeholders to facilitate testing, demonstration, and deployment of advanced electrification technologies; use complex system models to evaluate and assess the performance, reliability, capability, achievable energy savings, and performance of electrification and decarbonization technologies; and develop IAW electrification and peak load reducing scenarios and roadmaps, including identification of research needs and gaps for the IAW sectors.

25% Agreement Management. Manages complex research projects involving new industrial equipment designs and advanced electrification and grid flexible technologies. Responsible for project management phases, such as: prepare work statements, budgets, schedules, and contract amendments; identify measurable technical and economic objectives to determine project success; maintain technical and business relationships with the contractor; review monthly progress reports, actively manage the project, and prepare an evaluation of the project and brief management, as needed; inspect projects to ensure they meet technical, fiscal, and administrative objectives; review and approve or dispute contractor invoices; prepare all documents needed to close out grants and contracts; and update Program Information Management System (PIMS), Energize Innovation, and other databases.

15% Proposal Evaluation. Participates on technical scoring committees and provides expertise to determine how well the project addresses the scope of the solicitation criteria to the extent the project will advance science or technologies not adequately provided by the regulated and competitive markets, demonstrate project benefits and energy and load reduction savings that are consistent with engineering laws and principals, address market issues and needs and the resulting impact on the marketplace, and have a likelihood of success based on adequate project budget and identified staff resources. Prepares written findings of such evaluations for use by the technical scoring committee.

10% Research Results Dissemination. Oversees the finalization of complex project reports, fact sheets, and other documents to disseminate research results and lessons learned focusing on information that provides significant public benefits to California and meets the state’s energy policies and goals.
Consult with Stakeholders. Consults with research organizations, federal and state government agencies, utility representatives, and other technical experts to identify RD&D opportunities for advanced energy and electrification systems or technologies, generation alternatives, and other demand-side strategies and their applications. Defines, develops, and implements projects that meet the policy and technical objectives of the Division’s RD&D program through ongoing discussions and interactions with market stakeholders.

Marginal Duties

Perform 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.

Employee’s Name (Print): Vacant

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): Ilia Krupenich

Supervisor’s Signature: ___________________________  Date: ______________