



<b>Classification:</b> Electric Generation System Specialist I	<b>Position No.</b> 3200-4841-002
<b>CBID:</b> R09	<b>Office:</b> Energy Generation Research Office
<b>Date Prepared:</b> November, 2017	<b>Division:</b> Energy Research and Development
<b>KEY: (E) IS ESSENTIAL, (M) IS MARGINAL</b>	

Under the direction and supervision of the Electric Generation Systems Specialist III, the incumbent serves as part of Renewable Integration Research team to plan and implement research, development, and demonstration (RD&D) projects that advance renewable energy and distributed generation technologies. The incumbent plans, organizes, implements, and reports on the Electric Program Investment Charge (EPIC) program activities relating to the development of clean and affordable electricity generation. The goal of EPIC is to fund electric public interest investments that provide electricity ratepayer benefits, defined as promoting greater system reliability, lower costs and increased safety.

The incumbent will address the research issues affecting the design, operation, and integration of new energy technologies; identify and monitor research needs, such as methods, models, and techniques, to advance the energy system and renewable and distributed energy resources; focus on both community-scale and utility-scale renewable energy opportunities; evaluate the cost, design, operation, and locations of various generation; and review, prepare, and publish reports. Position requires developing knowledge in advancing renewable energy from a total systems perspective – including generation, distribution system (controls, communication, and functions), storage, plug-in electric vehicle, demand response, forecasting, flexible generation, and managing load.

**WORKING CONDITIONS:** The work is performed in an indoor office and meeting room setting involving sitting, standing, and walking. Travel is required to attend workshops, hearings and meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required. While performing the duties described below, the incumbent will be required to work alone, work within a team, utilizing a personal computer and appropriate Energy Commission software such as the Microsoft suite of software, electronic mail and the Internet. The incumbent will be required to plan, organize, assist and/or participate in meetings with other Energy Commission staff, staff from other federal and state agencies, consultants, contractors, and other parties active in energy-related research and development.

### **DUTIES AND RESPONSIBILITIES:**

45% Conduct EPIC Program planning and implementation, including implementation of Triennial Investment Plans; EPIC RD&D planning, contracting and grant award activities; and develop and implement innovative ideas, concepts and efforts to incubate new clean energy technology products and solutions through RD&D and market facilitation. The incumbent engages in completing complex technical analysis, evaluations, field demonstrations and systems tradeoffs on the ability of new and emerging renewable generation, distributed generation, and other energy technologies to conform to planning and operational elements of electric generation systems. Develop and use complex system models that will evaluate and assess the performance, reliability and capability of new energy technologies to perform in electricity systems both as individual technologies and within a larger portfolio of many different new technologies. Evaluate the ability of new technologies to fit in with present and future community-scale electricity generation resource adequacy. Using and interpreting the output of computer models, the incumbent will evaluate the potential impacts of the new technologies on state mandated goals



such as higher levels of electricity generation from renewable resources, reduction of greenhouse gas emissions from CHP systems, maintenance of reliable electricity delivery, reduction of natural gas use, and the need for emission reduction credits. (E)

- 30% Lead the research, design and development of new renewable generation and distributed generation technologies to ensure that they will, whether taken individually or as a group, fit in with electricity systems in terms of operation, characteristics, and benefits. The incumbent implement solicitations and collaborative strategies to meet EPIC Program goals through project development by defining the project scope, work statement, and budget. The incumbent reviews proposals to determine how well the project addresses the scope of the solicitation criteria including, but not limited to: the extent the project will advance science or technology, address market issues and needs, meet specified target goals and objectives; the skill and experience of the project team to carry out the technical tasks within budget and schedule, and move the results into the marketplace; and the adequacy of the project funding. The incumbent prepares written findings of such evaluations for use by technical scoring committee. The incumbent briefs Office, Division, Commission management and Commissioners on the status of the projects. (E)
- 10% Consult with and advise the Electric Generation Systems Specialist III, Energy Resources Specialist III, Division management and Commissioners on a variety of energy systems integration and research needs related to renewable energy and distributed generation technologies and their application on the electricity generation systems. Participate in identification of issues and analytic methodologies. (E)
- 10% Participate in the development of the EPIC Program annual report to the California Public Utilities Commission and participate in CPUC EPIC proceedings. Work with stakeholders and synthesize complex information from many sources into consensus (where feasible) regarding the direction of the electricity environmental-related RD&D. (E)
- 5% Perform other duties as required consistent with the specifications of this classification. (M)

<b>SIGNATURES</b>	
<b>I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position</b>	
<hr/> Incumbent <span style="float: right;">Date</span> Electric Generation System Specialist I	<hr/> Supervisor <span style="float: right;">Date</span> Electric Generation Systems Specialist III