



Classification: Electric Generation System Specialist I	Position No. 8200-4841-XXX
CBID: R09	Office: Demand Analysis
Date Prepared: December 6, 2013	Division: Energy Assessments
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL	

The Electric Generation System Specialist I is under the general supervision of the Energy Resources Specialist III (Supervisory) in the Demand Analysis Office (DAO) of the Energy Assessments Division. The incumbent is responsible for performing complex technical and analytical and consultative assignments in the field of electric system analysis, specifically in regards to analyzing, quantifying and forecasting California’s private electricity generation (distributed generation) supply and usage. This includes refining data collection techniques and methodologies to more accurately capture private energy supply data; creating, refining, and maintaining computer simulation models to more accurately forecast future private supply and use for incorporation into the state’s biennial energy demand forecast. The incumbent’s assignments also may include engineering studies of electric generation technologies and studies of the impact of regulatory policy, new generation technologies and fuels on private electricity supply and usage.

WORKING CONDITIONS: Work is performed indoors in an office setting, conference 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 and ventilation is adequate. The noise level may be high. Some travel may be required to attend off-site meetings. Additional hours beyond an eight-hour workday or forty-hour workweek may be required.

DUTIES AND RESPONSIBILITIES: The incumbent will provide technical leadership and guidance as well as expert analyses, data management, computer model development and maintenance, and technical expertise on a range of highly complex activities related to quantifying and forecasting private electricity supply, also known as self-generation or distributed generation, in California. The incumbent will incorporate analytical results into the broader energy demand forecasting and energy policy evaluation activities in DAO. More specifically, the incumbent:

- 40% Serves as the primary subject matter expert to initiate, plan, and coordinate projects needed to prepare the forecast of electricity generation associated with distributed generation (DG) technologies, including solar photovoltaics and combined heat and power. Performs technical and economic analysis related to the adoption and operation of DG technologies as part of the IEPR demand forecast. Evaluates the environmental impacts of DG relative to the state’s greenhouse gas reduction goals. Serves as the Energy Commission’s technical expert on DG issues related to both energy supply and energy demand forecasting. Acts as the project leader in activities related to collecting, evaluating, and applying relevant input data to update the DG predictive models. (E)
- 40% Provides expertise and leadership in developing, revising, and maintaining the computer simulation models that estimate California’s existing and future energy production associated with DG facilities, especially the energy produced that is consumed on site.



Assesses the technical, economic, and market potential of private electricity supply in the residential, commercial, and industrial sectors. Analyzes the impact of retail electricity and natural gas and wholesale natural gas prices on adoption of DG technologies. Evaluates how tax incentives, subsidies, retail rate design, and net metering policies affect the development of new DG projects. Develops technical assumptions and operational characteristics of DG technologies to predict future adoptions. (E)

- 10% As primary expert on energy produced by private supply, participates in Energy Commission, Public Utilities Commission, and other workshops, conferences, and proceedings which address energy demand forecasting and related topics. Coordinates and directs technical discussions on private supply issues in the DG subgroup of the Demand Analysis Working Group (E)
- 5% Performs innovative research and prepares written and oral technical reports on other energy demand related topics as needed. Manages contracts for professional services as needed. (E)
- 5% Performs other duties as required consistent with the job specifications of this 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	
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="display: flex; justify-content: space-between;"> Employee Date </div> <p>Electric Generation System Specialist I</p>	<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="display: flex; justify-content: space-between;"> Linda Schrupp Date </div> <p>Energy Resources Specialist III (Supervisory)</p>