



<b>Classification:</b> Electric Generation System Specialist I	<b>Position No.</b> 8100-4841-0XX
<b>CBID:</b> R09	<b>Office:</b> Supply Analysis – Distributed Generation Unit
<b>Date Prepared:</b> June 21, 2017	<b>Division:</b> Energy Assessments
<b>KEY: (E) IS ESSENTIAL, (M) IS MARGINAL</b>	

Under the general direction of the Electric Generation System Specialist III in the Supply Analysis Office, the incumbent will perform or direct varied, difficult, and complex engineering and economic analyses to provide decision-makers and the public with current and useful information and objective analyses of the impact of California’s new clean energy policies on electricity systems, markets, and issues. The incumbent may serve as a project lead over other technical and analytical staff. The incumbent’s work will be related to integrating distributed energy resources (DER) into the electric distribution and transmission grid to meet the state’s clean energy goals.

**WORKING CONDITIONS:** Work is performed indoors in an office setting involving sitting, standing and walking. Travel may be required to participate in workshops, hearings, and meetings. Work is technical and quantitative in nature. Additional hours beyond an eight-hour workday or forty-hour week may be required. While performing duties described below, the incumbent will be required to work alone or in team environments, using a personal computer and appropriate Energy Commission software such as word processing, electronic mail, and internet. Incumbent also participates and leads meetings with other staff and other agencies.

**DUTIES AND RESPONSIBILITIES:**

- 25% Develop technical assessments resulting from energy systems modeling such as power flow, or similar load-flow methodologies that will inform policy and enable cost-effective DER projects and markets. Review and report on existing tariffs, contracts, and programs available to DER developers in investor-owned utility and publicly owned utility service territories. Work, often in collaboration with the California Public Utilities Commission (CPUC), to develop cost-benefit assessments of DER facilities and guidelines for new tariffs that support increasing penetrations of these resources. (E)
- 20% Assess the impact of meeting California’s clean energy goals with distributed energy resources (DER) on electric distribution and transmission system reliability and resiliency. The incumbent will examine and analyze the operational and economic impacts of DER on California's grid. This includes analysis of programs and the costs associated with interconnecting DER, and integrating and operating these resources to support system reliability. Evaluate market participant strategies and identify policy options for supporting markets that will support development of these resources while containing costs. Identify emerging technical and economic challenges. Propose remedial actions. (E)
- 20% Compile, study, and coordinate collection of data and information on DER and with the CPUC, California Independent System Operator, utilities, and the Air Resources Board. Analyze and report on operational profiles of these resources and determine how they can be efficiently and cost effectively utilized and integrated into electric system operations to



meet both reliability and operational requirements. Develop new spreadsheet models to better understand how these costs overlap and can be integrated. (E)

20% Develop, and implement various methods to identify and assess the growth patterns of distribution connected DER statewide. Monitor impacts on the transmission and electricity sector. Compile data and information that is needed for system analysis and useful to electricity service market participants. (E)

10% Synthesize and communicate complicated information in a simple, consumer-friendly manner. Prepare reports, testify at Commission and CPUC hearings, and make presentations to staff, management, and the public on issues associated with electricity market developments. (E)

5% Performs 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>	
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Employee, EGSS I                      Date	Rachel MacDonald, EGSS III                      Date