

DUTY STATEMENT**CALIFORNIA PUBLIC UTILITIES COMMISSION**

DIVISION Safety Policy Division		EFFECTIVE DATE
BRANCH/SECTION Security & Resilience Branch/Emergency Response Section		CLASS TITLE Research Data Specialist III
WORKING DAYS AND WORKING HOURS Monday through Friday 8:00 a.m. to 5:00 p.m.		PHYSICAL WORK LOCATION Los Angeles, Sacramento, or San Francisco
		CURRENT POSITION NUMBER (Agency - Unit - Class - Serial) 680-151-5770-001
YOU ARE A VALUED MEMBER OF THE DEPARTMENT'S TEAM. YOU ARE EXPECTED TO WORK COOPERATIVELY WITH TEAM MEMBERS AND OTHERS TO ENABLE THE DEPARTMENT TO PROVIDE THE HIGHEST LEVEL OF SERVICE POSSIBLE. YOUR CREATIVITY AND PRODUCTIVITY ARE ENCOURAGED. YOUR EFFORTS TO TREAT OTHERS FAIRLY, HONESTLY AND WITH RESPECT ARE IMPORTANT TO EVERYONE WHO WORKS WITH YOU.		
BRIEFLY (1 or 2 sentences) DESCRIBE THE POSITION'S ORGANIZATIONAL SETTING AND MAJOR FUNCTIONS: Under general direction of the Program Manager, the Research Data Specialist III serves as the principal technical resource performing and leading a variety of complex data analyses related to natural and man-made hazards and utility resilience in the context of emergency management and cybersecurity to inform the Commission's decisions, procedures, and processes. This position will require the individual to determine scope and parameters of data taxonomy, data dictionary, research criteria and other elements of data collection and analysis in included geographic information systems (GIS).		
% of time performing duties	Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first. <i>(Use additional sheet if necessary)</i>	
	<u>ESSENTIAL FUNCTIONS:</u>	
30%	In coordination with other data analytics teams in the California Public Utilities Commission (CPUC), develop the scope of research and statistical method for data collection, analysis, and briefing about Investor Owned Utilities (IOU) operations, actions, and decisions related to utility assets and equipment related to resilience of utility assets and equipment, as well as GIS and/ or statistical data analysis and briefing about real and potential actions. Coordinate and participate in California Public Utilities Commission (CPUC)-wide development of a data taxonomy, data dictionary, templates and file repository, security protocol, and CPUC staff playbook to support broad internal data receipt, analysis, and briefing about utility risk mitigation.	
25%	Conduct analysis of hazards and risk trends, brief management and Commission offices on trends, and recommend and support development of policies and procedures to regulate utilities based on the analysis. Develop and use GIS and/or advanced analytical and statistical methodologies and modeling applications to collect, compile, and analyze data related to resilience and climate change.	
20%	Develop scopes of work, tasks, and requests for offers for expert consultants to assist the CPUC in collecting, synthesizing, and briefing data related to emergency management hazards. Collaborate in managing expert consultants to produce the deliverables required by the CPUC.	
10%	Work with the CPUC's to coordinate with other local state, federal and non governmental agencies that are focused on emergency management response and assist with the development of policies and procedure communication about utility resilience. Support the development of after-action reviews, public information, and public reports assessing the status of utility resilience and impact on communities and demographic groups, such as groups with Access and Functional Needs, in utility service territories.	
10%	Participate in/oversee interagency and stakeholder workgroups related to utility risk and resilience. Represent the Commission at workshops and conferences.	

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5%	<u>MARGINAL FUNCTIONS:</u> Perform other job-related duties as required. <u>KNOWLEDGE AND ABILITIES</u> <i>[From Class Specs]</i> Knowledge of: Data analysis methods and techniques including gathering and collection of structured and unstructured data, as well as general principles, concepts and terminology used in research; planning studies and investigations; trend analysis procedures; time management techniques to provide for efficient prioritization and completion of projects and assignments; software to prepare spreadsheet summaries, reports, charts, and tables; basic arithmetic and statistical techniques to analyze numerical data; and departmental policies and procedures. Design and implement research-related projects; practices required to ensure and maintain data security, including securely transmitting confidential data; experimental design procedures; problem-solving techniques and processes to identify and resolve issues related to the completion of work assignments; and advanced mathematical techniques and descriptive statistical analysis techniques and methods. Principles and concepts applied in research and statistical settings; principles and concepts appropriate to data and research techniques and methodologies; operations research methods; current data analytics processes, including the utilization of business intelligence software programs; broad principles of algorithms, data structures, and data management; application of computerized models to research data, statistical and other methods used in the analysis; survey methods and analytical techniques; organizational analysis including data presentation and interpretation; principles and procedures of forecasting, and of research planning, design, methodology; problem solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments. State, federal and departmental regulations; benefit-cost analysis; complex database design and structure to understand and complete research projects and assignments; and project management principles in order to design projects (e.g., define schedules, tasks, milestones, deliverables). Advanced automated processes for capturing data and applying quality control procedures to design and implement complex research projects; current leadership techniques and their application to ensure effective oversight of project team members; project management principles to monitor project progress, and conduct final project evaluation; and function as lead for complex large scale research projects. Ability to: Research, gather, compile, and analyze structured and unstructured data; conduct and interpret descriptive statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; prepare research and statistical reports; analyze written and numerical data regarding general governmental problems; speak and write effectively; develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems; manage a workload consisting of multiple projects and assignments; complete work under critical timelines to meet project objectives and deadlines; be objective and flexible to adapt to changes in priorities and work assignments; and gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams. Query, mine, analyze, and manipulate data; communicate effectively both orally and in writing to individuals and groups related to the area of research; present ideas and information effectively; adapt and apply formal research methods and principles to research problems; design and validate studies and analyze the accuracy of data collected; analyze quantitative and qualitative data to reach sound conclusions and/or make recommendations; identify improvements and originate and develop new solutions which depart from traditional and existing patterns; identify required data, information, materials, and resources needed to complete/performance a project; reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex research and data problems; consult with and advise administrators or other interested parties on a wide variety of subject-matter areas; recognize when issues, activities, and/or decisions need to be elevated to management, and communicate information effectively to others. Plan and carry out large scale research and data projects; prepare and present reports and data models; adapt and apply complex research methods and principles to research problems of an applied practical nature; identify required data, information, materials, and resources needed to complete/performance a project; identify data needs of complex analyses and evaluate adequacy of existing data to meet these needs; develop procedures for collection and integration of data sources; design and test complex data base structures for storage and manipulation; access
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and process data located on large databases, servers, mainframes and/or desktop computers; design and conduct a complex research project and/or validating studies; conduct program evaluation studies including the systematic analysis of program requirements, goals, and outcomes to ensure program effectiveness; analyze and evaluate the impact of programs, procedures, business processes, and/or policies; develop documents related to data processing and analysis procedures for research projects and assignments to be used as a future resource; determine how a system or process works and how utilizing new inputs, operations, and environmental conditions would affect outcomes; function as a technical lead for complex projects to ensure timely completion; provide technical assistance to professional personnel; establish and maintain cooperative relationships with others, and with stakeholders; communicate with internal and external stakeholders with diplomacy and tact, especially concerning difficult and sensitive issues. Translate legislatively mandated program evaluation requirements into methodically rigorous study designs; translate departmental policy into action programs and/or test the impact of policy changes; evaluate the adequacy and merit of proposed research and evaluation study designs and techniques; provide expert consultation on the feasibility impact or potential of a variety of operations, projects or proposals to the department and to other organizations; analyze and evaluate the impact of changes to existing programs, procedures, business processes, and/or policies; use creativity when independently designing research projects; and write clear and concise studies and reports; design and develop research methodologies required to ensure the collection and analysis of appropriate, meaningful, and unbiased data; conduct and interpret descriptive and/or inferential statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; analyze situations accurately and take effective action at the appropriate time; and provide mentoring to staff. Present complex quantitative and qualitative data visually using charts, graphs, tables, and other appropriate methods in order to complete reports and/or develop presentations; design and implement advanced automated processes utilizing statistical software for capturing data and applying quality control procedures to design and implement research projects work on multiple projects and assignments simultaneously to finish assignments on time and within budget; develop and prioritize short-range and long-range plans and schedules that coordinate with operating goals and objectives of the department; and facilitate meetings and discussions in a manner that ensures participants remain focused on the intended topic and encourages active participation.

WORK ENVIRONMENT, PHYSICAL OR MENTAL ABILITIES:

- Proficiency with communications-related technologies, including personal computer applications, telecommunications equipment, Internet, voicemail, email, etc.
- Ability to keep information confidential due to the sensitive nature of the position.
- Occasional travel up to 25% to include evenings, overnight, weekends or several days at a time.

SUPERVISOR'S STATEMENT: I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE

SUPERVISOR'S NAME (Print)

SUPERVISOR'S SIGNATURE

DATE

EMPLOYEE'S STATEMENT: I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT

The statements contained in this duty statement reflect general details as necessary to describe the principal functions of this job. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absence of relief, to equalize peak work periods or otherwise balance the workload.

EMPLOYEE'S NAME (Print)

EMPLOYEE'S SIGNATURE

DATE