



SENIOR ENERGY ANALYST

\$54.99 - \$91.65 hourly (approximately \$114,375 - \$190,625 annually)

SUMMARY DESCRIPTION

Persons working in this job class will receive direct supervision from the Director of Planning and Analytics and work across the organization with Sonoma Clean Power (SCP) leadership and staff in some or all functions related to power supply planning, load forecasting, advanced analytics, and risk management. The individual in this position will develop significant subject matter expertise in SCP's operations and will be required to work independently on various projects as they come up, including model building, portfolio optimization, forecasting, customer energy data analysis & reporting, mapping, and database development.

As systems are implemented, this position will have increasing and significant autonomy to explore novel solutions to problems facing SCP as a load-serving entity (LSE) with core mandates of reducing greenhouse gas emissions, maintaining competitive and stable electric rates, supporting local Sonoma County economic development, and meeting SCP's obligations under various legislative and regulatory mandates.

REPORTING AND SUPERVISION

Direct supervision is received from Ryan Tracy, the Director of Planning and Analytics, with supplemental direction from other SCP directors, as needed. The primary workplace for this position is at the SCP facilities in Santa Rosa, CA. SCP provides a flexible schedule with availability to work at home for some shifts. Any specific remote work scheduling requests shall be submitted to the Director of Planning and Analytics for prior approval.

The FLSA classification of this position is Non-Exempt.

ESSENTIAL JOB FUNCTIONS

This job description indicates, in general terms, the type and level of work performed as well as the responsibilities of employees hired for this position. The job functions described are not to be interpreted as being all-inclusive to any specific employee. Management reserves the right to add, modify, change, or rescind the work assignments of any position and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

The Senior Energy Analyst will:

- Develop, maintain, and apply SCP's internal load forecasting model.
- Develop SCP's Integrated Resource Plan (IRP) through stochastic portfolio modeling and optimization.

- Evaluate and monitor risk exposure of SCP's portfolio to adverse market and regulatory changes.
- Develop long-term forecasts for resource generation and value streams to support portfolio planning and support evaluation of procurement opportunities.
- Support development of annual budget through forecasting of customer revenue, resource revenues, and procurement costs.
- Augment and support maintenance of SCP's existing database and automated data feeds of data on load, resources, weather, and customer attributes.
- Build interactive business intelligence reports and dashboards to streamline decision-making and data analysis across disciplines in the agency.
- Work closely with SCP staff to use data to successfully develop and implement customer responsive programming.
- Utilize a variety of computer software programs to prepare reports, graphs, and other material related to energy resources, finance models, usage trends, and customer statistics to fulfill requests from across the agency.
- Keep abreast of customer trends, patterns, and issues; use data to evaluate current trends and determine if existing policies or procedures should be modified to better serve SCP customers.
- Map geographic datasets such as generators, transmission lines, distribution circuits, and customer meters to inform resource planning, advocacy on Public Safety Power Shutoffs, and design of customer programs and marketing campaigns.
- Support SCP initiatives to promote development of local energy resources through data analysis, research, and active stakeholder management.
- Prepare and provide reporting to agencies such as the California Public Utilities Commission, California Independent System Operator, and the California Energy Commission.
- Write narratives required to accompany regulatory filings on load forecast and resource portfolio and assist in development of reports and presentation materials for SCP Board of Directors.
- Lead development and maintenance of internal web application and other tools to improve the efficiency of cross-agency workflows and accessibility to data.
- Have the ability and understanding to adhere to the Personnel Rules and Policies of SCP.
- Perform other duties and related tasks as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge and skills:

- Experience completing statistical analysis, building statistical models, and forecasting (particularly using R). Knowledge and experience with machine learning or artificial intelligence is a plus.

- Experience in portfolio optimization using stochastic techniques and evaluating financial risk.
- Familiarity with demographic and geographic datasets and experience mapping and using data to inform forecasting, business decisions, and/or marketing strategies.
- Advanced understanding of California electric sector, including market products, grid architecture, resource forecasting, and regulatory requirements.

Ability to:

- Develop and maintain web applications for enabling data input and data accessibility.
- Create business intelligence reports and dashboards sourced from SQL databases (preferably by using PowerBI).

REQUIRED QUALIFICATIONS

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Minimum of a Bachelor's degree from an accredited college or university with major course work in business, economics, engineering, statistics, mathematics, computer science or related field. Demonstrated technical and analytical skills in systems and processes is required, **AND**,

Experience: Five (5) years of increasingly responsible, relevant work experience **AND**,

- The ability to work with complex models, data, and reports.
- Proficiency in using MS Office suite products, particularly Excel.
- High aptitude in querying from SQL data sources.
- Ability to build data pipelines from a variety of sources, including web APIs and SFTP, and reliably store and update in database (preferably by using Python).
- Excellent verbal and written communications skills.
- Familiarity with California electricity sector including resource types, load composition, technology, market, and regulations.
- Knowledge of statistical analysis concepts and modeling techniques.

PHYSICAL AND WORKING CONDITIONS

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Normal office environment with exposure to computer screens. Employees will interact with staff and/or public and private representatives in interpreting and enforcing the Authority's policies and procedures. Some travel is required.

Physical: While performing the duties of this class, employees are regularly required to sit, walk, and stand; talk or hear, in person and by telephone; reach with hands and arms. Employees are occasionally required to walk, and stand for prolonged periods; stoop, bend, kneel and twist; and may lift up to 20 pounds. Employees must be able to communicate in person, in writing, and by telephone with Board members, management, coworkers, vendors, consultants, and with the public in face-to-face, one-to-one, and group settings. Position requires the ability to frequently travel to relevant California locations to meet with state agencies and law makers.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and operate assigned equipment.

Hearing: Hear in the normal audio range with or without correction.

Mental: While performing the duties of this class, the employee is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; observe and interpret situations; learn and apply new information or skills; perform highly detailed work; work on multiple concurrent tasks; work with frequent interruptions; work under intensive deadlines; interact with SCP management, Board, staff, vendors, the public, and others encountered during the course of work.

SCP actively works to provide an inclusive work environment, where people of different ethnicities, national origins, native languages, races, skin colors, sexes, genders, sexual orientations, ages, physical abilities, genetics, politics, religion, financial wealth, and education feel welcome, safe, and invited to fully participate at every level. SCP further seeks to contribute to a more inclusive and equitable society through our actions, our communication, our policies, and our investments. SCP expects all its employees to contribute to these goals.

**SONOMA CLEAN POWER IS AN EQUAL EMPLOYMENT OPPORTUNITY
(EEO)/ AND AMERICAN DISABILITIES ACT (ADA) EMPLOYER**