



POWER RESOURCES DATA ENGINEER

SALARY RANGE: \$124,836 - \$181,946

SUMMARY DESCRIPTION

The Data Engineer works within the Operations group of the Power Resources department to lead the design, implementation, and management of an optimized and reliable overarching data architecture for SVCE's wholesale power portfolio data. This position works closely with other groups in the Power Resources (4PRO) team to assist their data needs as well as the Finance & Administration team on SVCE's Energy Trading and Risk Management (ETRM) system.

SUPERVISION RECEIVED AND EXERCISED

This position reports to the Senior Manager of Power Operations. Management of projects, consultants and contractors is required.

ESSENTIAL FUNCTIONS

- Design, implement and manage an optimized and reliable overarching data architecture to support SVCE's wholesale portfolio data.
- Develop and maintain the infrastructure required for extraction, transformation, and loading of data from a wide variety of data sources (ETL).
- Identify, design, and implement internal process improvements, including automating manual processes, optimizing data delivery, and re-designing infrastructure for greater scalability.
- Design and implement best practices for data storage, versioning, querying, as well as managing relevant documentation and staff training.
- Build processes supporting data transformation, data structures, metadata, dependency and workload management.
- Collaborate across the organization and with external partners to aggregate additional relevant data sets to support business functions.
- Design and develop data analytics dashboards, visualization tools, and applications.
- Collaborate with internal and external stakeholders to understand business and policy challenges, goals and objectives and translate them into data analytics use cases.
- Support data requests with key Silicon Valley stakeholders such as regulators, including the California Public Utilities Commission (CPUC) and California Energy Commission (CEC), and large C&I customers.
- Be the Power Resources department go-to for data needs; assisting users with establishing new data pipelines, optimizing existing data workflows, and ensuring ongoing data quality and performance.

KNOWLEDGE, SKILLS, AND ABILITIES

- Experience building and optimizing 'big data' data pipelines, architectures, and data sets.
- Excellent programming and statistical programming skills, including Python and R,

respectively.

- Working knowledge of message queuing, stream processing, and highly scalable 'big data' data stores.
 - Advanced working SQL knowledge and experience working with data warehouses and relational databases, as well as working familiarity with a variety of databases.
 - Strong understanding of statistics, machine learning, and optimization algorithms and principles, and their application (regression analysis, time series, probabilistic models, supervised classification and unsupervised learning).
 - A successful history of cleaning, manipulating, processing and extracting value from interval energy data and other large disconnected datasets.
 - Subject matter expertise or interest in one or more of the following topics: wholesale electricity markets, retail electricity markets, retail rate design, energy resources and procurement.
-
- Superior project management skills, including managing multiple priorities.
 - Self-directed and comfortable operating in a dynamic, fast-paced start-up environment.
 - Experience supporting and working with cross-functional teams in a dynamic environment.
 - Ability to work independently and in a team.
 - Excellent communication skills, including distilling complex information in a simple and understandable manner.

REQUIRED QUALIFICATIONS

Experience and Training Guidelines: *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: A Bachelor's Degree from an accredited university or college in science, technology, engineering, mathematics, or a related, quantitative field. A Master's Degree in the aforementioned fields can substitute for up to one year of the required experience. A Doctoral Degree in the aforementioned fields can substitute for up to three years of the required experience.

EXPERIENCE: Four (4) years of progressively responsible experience as a data engineer or similar role at a software company, electric utility, cleantech company, or similar organization.

LICENSE: Possession of a valid Class C California driver's license and a satisfactory driving record at the time of hire.

PHYSICAL AND WORKING CONDITIONS

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

ENVIRONMENT: Work is performed in a typical office setting with exposure to computer screens and at public events (fairs, meeting rooms, farmers' markets, etc.) with moderate noise and will require some evening and weekend work. The noise level in the work environment is usually typical of an office environment and public events.

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, co-workers, vendors, consultants, and with the public in face-to-face, one-on-one, and group settings.

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.

-----SVCE IS AN EQUAL OPPORTUNITY EMPLOYER-----