CITY OF SANTA CLARA, CALIFORNIA
CLASS SPECIFICATION

TITLE: ELECTRIC UTILITY INFORMATION TECHNOLOGY SYSTEMS SPECIALIST (JOB CODE 440)

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Electric Utility	Various	Non-Exempt

CLASS SUMMARY
The Electric Utility Information Technology Systems Specialist is assigned to the City's Electric Utility Department, Silicon Valley Power (SVP), which supports critical 24/7 utility operations, general business office environments, and new technology projects. This includes user computer maintenance, user training, communications systems, card access or security systems, and other technology platforms. This position is often the first line of contact for users needing assistance in parallel to technology platform operations. The incumbent may be required to work at times other than the regularly scheduled work hours. Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS
The Electric Utility Information Technology Systems Specialist is responsible for performing the full range of support their assigned program area and is expected to work independently and exercise judgment and initiative. This position is distinguished from the higher-level Electric Division Manager classification in that the latter is a professional position in the unclassified service responsible for managing a Division of the Electric Utility Department.

MINIMUM QUALIFICATIONS
EDUCATION AND EXPERIENCE
- A Bachelor's Degree from a college or university with major work in computer science, software engineering, technology hardware, or a related field; and
- One (1) year of programming experience in one or more high level structured program languages, networking, and/or operating systems management.

ACCEPTABLE SUBSTITUTION
Additional qualifying experience may be substituted on a year for year basis for the required education, up to a maximum of four (4) years.

LICENSES/CERTIFICATIONS
None.

DESIRABLE QUALIFICATIONS
- Experience working with municipal utilities or in a telecommunications environment;
- Possession of advanced computing, computer technician, and/or cybersecurity certificates, such as A+, Security +, etc.);
- Experience with Operating Systems (such as Windows, Apple OSX, and iOS, Linux, etc.) and Microsoft 365 or other cloud-based platform; and
- Experience with virtualization software (such as VMWare and Hyper-V).

When assigned to the Electric Utility Operations Division, in addition to the above:

- Experience with Remote Terminal Units (RTUs), microprocessor-based relays, and the Distributed Network Protocol (DNP); and
- Experience using Supervisory Control and Data Acquisition (SCADA) systems

OTHER REQUIREMENTS
- May be required to work unusual hours and weekends in the performance of their duties and be available on an "on call" basis.
- Incumbents will be required to pass initial and periodic comprehensive background checks, which may include fingerprinting, to meet Federal, State and/or industry security requirements.
- Must be able to perform all of the essential functions of the job assignment, with or without reasonable accommodations.

TYPICAL DUTIES

This description may not include all the duties listed below, nor do the examples cover all duties that may be performed.

Under general direction, the incumbent will:
- Perform a variety of programming and analytical tasks including evaluating, flow-charting, logical mapping, coding, implementing and maintaining electric department resource forecasting, analysis, scheduling/dispatching, and networking and communication with local and remote computer systems;
- Adhere to industry and department best practices and requirements for cybersecurity;
- Analyze, evaluate, test, debug, and support applications to ensure system engineering and infrastructure is appropriate;
- Assist users with technology issues;
- Edit and estimate meter data, troubleshooting data processing problems when needed;
- Patch and maintain the Electric Department's applications according to industry best practices and, when required, NERC CIP standards;
- Develop, prepare and maintain system methods and documentation;
- Train electric department personnel in the use of computer systems;
- Write scripts to automate tasks in Windows and Linux (e.g., VB Script, PowerShell, Python, Perl, Linux Shell Scripts);
- Provide technical support and training to end users and staff ;
- Write user guides, procedures, system standards, and technical system documentation;
- Confer with vendors regarding system and database related issues;
- Process requests for troubleshooting failures and questions and takes corrective actions by interpreting problems and providing technical support for hardware, software, and network system;
- Manage computer inventory, print servers, voicemail server, and maintains Internet Protocol (IP's) and configuration to ensure they are up to date;
- Manage vendor contracts and budgets for software licenses;
- Evaluate additions/improvements to computer hardware and software; and
- Perform other related duties as required.

ELECTRIC UTILITYINFORMATION TECHNOLOGY SYSTEMS SPECIALIST (440)

KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of:
- Windows and Linux operating systems and their associated administration and patching;
- Hardware, software, and telecommunications systems and standards for real-time data collection;
- System analysis methods, structured language methods, micro and minicomputer architecture and operation including system utilities;
- Program coding and testing;
- Communication protocols such as TCP, UDP, and IP;
- Operational and platform management applications; and
- Environmental and safety practices, procedures, and standards.

Ability to:
- Apply effective programming methods to applications;
- Communicate effectively, both orally and in writing;
- Analyze complex procedures and data and develop appropriate logical conclusions;
- Evaluate and maintain electric utility applications;
- Troubleshoot existing systems and programming malfunctions and take corrective actions;
- Document and maintain documentation of current system requirements;
- Effectively handle multiple priorities, organize workload and meet strict deadlines;
- Establish and maintain effective working relationships with those contacted in the course of work, including the general public;
- Work in a team-based environment and achieve common goals;
- Prepare and maintain budgeting information related to software and hardware life cycle;
- Walk or stand for extended periods of time; and
- Bend, stoop, reach, carry, crawl, climb and lift as necessary to perform assigned duties.

SUPERVISION RECEIVED
Works under the direction of the Electric Division Manager, or other manager as assigned.

SUPERVISION EXERCISED
May supervise interns or other personnel as assigned.

CLASSIFICATION HISTORY
Established 12/03/2013, Rev. 12/16/2016, Rev. 6/2025