

CLASS SPECIFICATION
Senior Electrical Engineer, P.E.

GENERAL PURPOSE

Under direction, manages, oversees, evaluates, monitors and participates in the conduct of multiple complex electrical utility capital improvement/construction projects; supervises and oversees the work of division professional, technical and administrative support staff; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Senior Electrical Engineer, P.E. is the advanced professional level class in the professional engineering class series. Incumbents are responsible for managing assigned electrical utility capital improvement projects and performing the most complex professional electrical engineering work requiring a substantial level of professional training and experience. Incumbents are also responsible for supervising, assigning, monitoring and overseeing the work of assigned professional, technical, administrative support and contract staff. Assignments are of a continuing nature, requiring the exercise of independent judgment, initiative and problem-solving.

Senior Electrical Engineer, P.E. is distinguished from Associate Engineer in that incumbents in the former class are expected to perform the most complex professional electrical engineering work, requiring professional registration and a greater degree of engineering experience.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Supervises and evaluates technical issues related to the management of the design and construction of electric distribution facilities including the creation and maintenance of electric standards, electric distribution plans, and electric distribution design tools.
2. Coordinates and manages electric distribution planning and long range planning effort with the development community, city staff, and contract staff.
3. Plans, organizes, supervises and evaluates the work of assigned staff; with staff, develops, implements and monitors work plans to achieve assigned goals and objectives; contributes to development of and monitoring of performance against the division and project budgets; participates in developing, implementing and evaluating work programs, plans, processes, systems and procedures to achieve division and City goals, objectives and performance measures consistent with the City's quality and service expectations.
4. Plans and evaluates the performance of assigned staff; establishes performance requirements and personal development targets; regularly monitors performance and provides coaching for

performance improvement and development; recommends compensation and provides other rewards to recognize performance; subject to management concurrence, takes disciplinary action, up to and including termination, to address performance deficiencies, in accordance with the City's human resources policies and labor contract provisions.

5. Provides day-to-day leadership and works with staff to ensure a high performance, customer service-oriented work environment which supports achieving City objectives and service expectations; provides leadership and participates in programs and activities that promote a positive employee relations environment.
6. Acts as Resident Engineer and manages, oversees, evaluates and monitors assigned electric utility capital improvement projects under construction; prepares and maintains detailed project cost estimates and schedules; obtains all necessary regulatory approvals and permits to implement projects; responds to requests for information and clarifies and interprets engineering issues, regulations, codes and requirements; chairs preconstruction meetings, reviews construction schedules and prepares preconstruction meeting minutes; verifies available project funds and prepares purchase requisitions; reviews, evaluates, processes, initiates and prepares change orders, amendments to agreements, schedule revisions and updates, etc.; drafts reimbursement invoices to funding agencies and ensures payment; files notices of completion with County Recorder upon City Council approval; releases retention payments to contractors; prepares and provides regular project status reports to division management and the City Manager.
7. Manages, oversees, evaluates and monitors assigned electric utility projects; supervises and participates in plan check processes; reviews and checks various plans, legal documents and studies to ensure compliance with City standards; attends pre-construction meetings with developers, contractors and engineers and resolves construction-related problems; represents the division on Project Review Staff Committees and coordinates development projects with City staff and other agencies to provide feedback to developers; meets with developers to discuss land development projects; reviews development projects and prepares, modifies, clarifies and updates written comments and conditions of approval; represents the division at Planning Commission meetings and answers questions regarding development projects; interprets conditions of approval for the public; recommends approval for building permits and certificates of occupancy; reviews developer supporting documentation and calculates development impact fee credits, refunds or reimbursements; conducts a variety of special studies, including user fees studies.
8. Participates in the selection and supervision of project consultants and contractors; prepares requests for proposals for outside services; reviews consultant plans, specifications, submittals, estimates, designs, drawings and schedules of values for completeness, accuracy, scope of work, constructability and compliance with federal, state and local requirements; provides recommendations for acceptable alternative solutions to design errors and other issues; interviews contractor employees and verifies compliance with federal and state prevailing wage rates and notifies contractors of discrepancies; verifies rating of contractor bonds and insurance requirements and submits to Risk Management for approval; evaluates bids and recommends awarding of contracts; monitors consultant performance and inspects work for conformance with plans and specifications; assesses, identifies and facilitates complete resolution of non-compliance issues; reviews, verifies and processes consultant and contractor invoices and pay requests for payment.

9. Manages and participates in advertisement and bidding processes for projects; prepares bid notices; sets bid opening times and dates and attends as assigned; prepares necessary addenda; verifies bid results and bid numbers to identify errors and omissions and provides information to the City Attorney as necessary; performs detailed records and reference checks for contractors and subcontractors; prepares and submits required documentation to funding agencies to ensure compliance with bid requirements.
10. Coordinates project activities with other City departments and divisions, consultants and external agencies; conducts and facilitates regular project staff meetings.
11. Serves as primary liaison between the City and contractors and consultants; works with contractors, consultants and others to resolve conflicts and facilitate solutions; inspects project sites to ensure compliance with project specifications and City policies and resolve issues.
12. Prepares and updates a variety of complex and technical engineering project documentation, including staff reports, bid notices, project plans and specifications, requests to advertise and adopt plans and specifications, grant applications, various notices, statements of working days, final maps, bonds, agreements, right-of-way acquisitions and other documents; drafts interagency agreements for reimbursement and conveyance of easements; prepares future project cost estimates and schedules for the City's Ten Year Capital Improvement Plan.
13. Analyzes and responds to requests for information and complaints from customers, other public and governmental agencies, community and business groups, citizens, the media and the public; represents the City and makes presentations at various meetings and public hearings.
14. Identifies, evaluates, selects and submits grants for City Council approval; prepares and submits applications for various federal and state grant funding programs; ensures project compliance with grant requirements.
15. Confers with other City departments and divisions for the update of City Standard Plans; implements revisions and additions to Standard Plans; supervises drafting of Standard Plans; maintains complete records of updated and strike-out versions of Standard Plans; provides revised Standard Plans to Media & Communications department for update to City website.
16. Coordinates and conducts quarterly utility coordination meetings with other City departments, utility companies and other agencies to discuss current and potential future capital improvement projects; supervises the preparation of location maps, detailed project lists and construction schedule lists for all division capital improvement projects; prepares and distributes meeting summaries to meeting attendees; provides information to Media & Communications department for update to City website.

OTHER DUTIES

1. Attends a variety of training sessions, committees, meetings, conferences and seminars as assigned.
2. Provides backup to department professional engineering staff as required.
3. May act as Electrical Utility Division Manager in that individual's absence.

QUALIFICATIONS

Knowledge of:

1. Theories, principles and practices of electrical engineering and design and construction of electric distribution facilities.
2. Principles and modern techniques of and commonly used materials and equipment used in design, construction and maintenance of various engineering projects.
3. Project management methods and practices for planning, budgeting, scheduling, monitoring performance and evaluating results.
4. Principles and practices of public administration, including budgeting, purchasing, contract administration and maintenance of public records.
5. Federal, state and local laws, regulations and court decisions applicable to assigned areas of responsibility.
6. Information technology and computer capabilities applicable to functional responsibilities.
7. Principles and practices of sound business communication.
8. Principles and practices of effective supervision.
9. City human resources policies and procedures and labor contract provisions.

Ability to:

1. Prepare, direct preparation of and review complex engineering designs, plans, specifications and legal contracts.
2. Perform difficult technical research and analyze complex engineering and mathematical problems, evaluating alternatives and recommending or adopting effective courses of action.
3. Plan, organize, manage and integrate engineering design and construction activities.
4. Define issues, analyze problems, evaluate alternatives and develop sound, independent conclusions and recommendations.
5. Understand, interpret, explain and apply federal, state and local policy, law, regulations and court decisions applicable to areas of responsibility.
6. Present proposals and recommendations clearly, logically and persuasively in public meetings.
7. Represent the City effectively in negotiations and other dealings on a variety of difficult, complex, sensitive and confidential issues.
8. Operate a personal computer using standard or customized software applications appropriate to assigned tasks.
9. Supervise and evaluate the work of professional consultants, construction contractors and designated staff.

10. Exercise sound independent judgment within general policy guidelines.
11. Prepare clear, concise and comprehensive correspondence, reports and other written materials.
12. Organize, set priorities and exercise sound independent judgment within areas of responsibility.
13. Exercise tact and diplomacy in dealing with sensitive and complex issues and situations.
14. Establish and maintain effective working relationships with City management, staff, contractors, consultants, representatives of other governmental and utility agencies, business and community groups, citizens, the public and others encountered in the course of work.

Education, Training and Experience:

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from a four-year college or university with a major in electrical engineering or a related engineering discipline; and at least six years of progressively responsible electrical engineering experience; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

Current, valid registration as a Professional Electrical Engineer with the California State Licensing Board.

A valid California driver's license and the ability to maintain insurability under the City's vehicle insurance policy.

PHYSICAL AND MENTAL DEMANDS

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 class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is regularly required to sit; talk or hear, both in person and by telephone; use hands to finger, handle and feel computers and standard business equipment; and reach with hands and arms. The employee is frequently required to stand and walk.

Specific vision abilities required by this job include close vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret complex data, information and documents; analyze and solve complex problems; use math/mathematical reasoning; perform highly detailed work under changing, intensive deadlines, on multiple concurrent tasks; work with constant interruptions, and interact with City management, staff, contractors, consultants, representatives

of other governmental and utility agencies, business and community groups, citizens, the public and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Employees work under typical office conditions, and the noise level is usually quiet. Employees may occasionally be required to work in outside conditions, exposed to wet and/or humid conditions, where the noise level may be loud.