PROVO CITY CLASSIFICATION SPECIFICATION	
Title: Senior Systems Electrical Engineer	<b>Job Code:</b> 2710
Date: November 19, 2018	EEOC Code: PR
FLSA Designation: Exempt	Civil Service Status: Covered (UC)

**DEFINITION:** This is advanced electrical engineering and highly complex project management work as a registered professional engineer in the Energy Department.

**CLASSIFICATION STANDARDS:** Positions in this classification are responsible to the Systems Operations Manager and perform all work under very limited direction. This work is distinguished by its responsibility to conduct professional systems analysis by a certified professional engineer and responsibility to oversee and supervise complex engineering projects.

ESSENTIAL DUTIES: Prepare and oversee the design and construction of highly complex and major electrical engineering projects in accordance with professional engineering principles and City standards; participate in reliability and capital planning and recommend projects and technical standards to improve and maintain system integrity and cost effectiveness; monitor program effectiveness and ensure compliance with NERC reliability standards; perform professional engineering functions in supporting power system operation, outage restoration, maintenance, expansion, and technical training; develop policies and procedures to manage projects; develop detailed project plans, including overseeing all aspects of project budgets, time and resource scheduling, implementation staging, and cost accountability; as needed, hire consultants and contractors and approve their assignments, parameters, and work product; review highly complex electrical plans and ensure compliance with applicable standards; approve or prepare complex project documents; provide regular status reports; ensure as-built documentation is secured and applicable maps, records, and drawings are modified.

Supervise, coordinate, and perform electrical systems analysis and planning, system dispatching, SCADA, outage management, short circuit and power flows, load balancing, load forecasting, protective relaying, fuse coordination, smart grid development, compliance, budgeting, engineering construction management, and system restoration, as assigned; engineer and design routing and layout of electrical transmission and distribution lines, substations, and related facilities; coordinate relay calibration and maintenance; review and maintain system model and coordinate regular updates.

Supervise assigned personnel, including scheduling workload; assist in training assigned personnel; ensure work is completed accurately and efficiently; identify, evaluate, and resolve personnel concerns; if needed, conduct performance evaluations and enact discipline; assist with staffing decisions, including hiring and firing personnel; as needed, function as acting Operations Manager; respond to public inquiries; perform the work of lower-level employees; assist other employees as needed; perform other related duties as required.

**MINIMUM REQUIREMENTS:** Bachelor's Degree in Electrical Engineering or closely related field and four (4) years of experience at the level of a Systems Electrical Engineer II **OR** an equivalent combination of job-related education and/or experience [substituting each one (1) year of post-secondary education/training for six (6) months of experience].

<u>License(s)/Certifications</u>: A valid, lawful Driver's License is required. State Professional Engineer license is required (State of Utah within one year).

SELECTION FACTORS: Knowledge of: current electrical power theory, methods, techniques, and systems analysis; standard utility practices and equipment, including computers; the National Electrical Code and National Electrical Safety Code; protective relay theory and application, relay testing skills, and system coordination; principles of project planning. engineering, design, and management; modern supervisory principles and procedures, including finance, budgeting, planning, organizational behavior, and basic human resources: related laws, codes, rules, and regulations governing functions of the position; policies and procedures established for the work system, including safety standards and safe work practices; the operations, functions, and terminology common to electrical engineering; basic English composition, spelling, and grammar. Skill in: power/utility applications; engineering and design of sub-transmission, distribution, substations, and control; work management and organization; advanced engineering computations; interpersonal relations and management as applied to directing and supervising employees and making contact with contractors, outside agencies. and public officials; practicing trust-building behaviors. Ability to: prepare and present clear. concise, accurate, and informative highly complex reports; explain technical and engineering plans to non-technical officials and the public; plan and manage large and complex projects; prepare cost estimates; perform advanced field analysis and engineering research; quickly and accurately perform work; develop and maintain effective working relationships with the public. coworkers, and superiors; perform duties in a manner that demonstrates respect, integrity, courtesy, and kindness towards fellow workers, customers, and the general public; exercise independent judgment while evaluating situations and in making determinations; demonstrate a high level of commitment to the principles of positive customer service; deal with the public in a pleasant, courteous, and calm manner in all circumstances; communicate effectively both verbally and in writing; evaluate programs and procedures; organize assigned work and develop effective work methods.

**TOOLS AND EQUIPMENT USED:** Computer-based mapping/electrical system analysis workstation, various engineering analysis software, printers, plotters, scanners, various meters, thermal imagers, power analyzers, survey equipment, telephone, radios, motor vehicle.

**PHYSICAL DEMANDS:** Requires sitting at a computer or desk for long periods, frequent walking over undeveloped ground, and physical strength and agility for lifting, bending, and stooping.

**ENVIRONMENTAL FACTORS:** Requires potential exposure to adverse weather conditions in all seasons, fumes, chemicals, energized electrical equipment, construction traffic, and noise. May also require exposure to high-stress situations or environments, including contact with the public in confrontational or uncomfortable circumstances. *Note: Employees of this class may be subject to on-call status. RESIDENCY: Employees of this class may be subject to Provo City residency requirements as demanded by the position.* 

Department Director

Mayor/Chief Administrative Officer

Date

NOTE: The above statements describe the general nature and level of work being performed by the person(s) assigned to this classification. They are not intended to be an exhaustive list of all duties, responsibilities, and skills required of personnel so classified. Class specifications are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, change, or delete any and all provisions of this classification at any time as needed without notice. Reasonable accommodations may be made for otherwise qualified individuals who require and request such accommodation. This class specification supersedes earlier versions.