PROVO CITY CLASSIFICATION SPECIFICATION	
Title: Smart Grid Systems Engineer	<b>Job Code:</b> 2718
Date: September 28, 2017	EEO Code: PR
FLSA Designation: Non-exempt	Civil Service Status: Covered (UC)

**DEFINITION:** This is highly-skilled managerial work responsible for the smart grid infrastructure.

**CLASSIFICATION STANDARDS:** The position allocated to this classification is responsible to the Assistant Energy Director and performs tasks under general direction. This work is distinguished by its responsibility for all aspects of the Power Systems Smart Grid infrastructure and is distinguished from lower-level staff by its full supervisory duties.

ESSENTIAL DUTIES: Manage OT/IT integration and automation, backup, documentation, and all technology projects of all Smart Grid processes, applications, and infrastructure; ensure infrastructure integrity and high operational reliability, performance, and systems availability; oversee daily reporting and tuning of Smart Grid infrastructure systems; monitor system events and operational conditions; manage, plan, coordinate and/or implement the support of existing infrastructure hardware and software, new hardware and software integration to the smart grid infrastructure, and hardware, software and/or policy to resolve gaps identified by technical needs assessment; manage standards implementation to ensure compliance of NERC/WECC cyber/physical security protocols requisite of the Supervisory Control and Data Acquisition, Automated Metering Infrastructure, Distribution Automation, and Demand Response Control Systems; review current and future requirements from business and technical needs assessments.

Research, develop, and submit a timely and accurate division budget including CIP for improvements and upgrades to Smart Grid infrastructure, divisional, operational, and maintenance budgets; monitor budget during fiscal year; coordinate alignment of CIP budgets and technology road map with technical needs assessment results; prepare and present various statistical and analytical reports; as needed, represent the City in various meetings and on multiple boards.

Manage and train staff supporting 24x7 Smart Grid infrastructure operations including, but not limited to: Supervisory Control and Data Acquisition, Automated Metering Infrastructure and associated personnel, Distribution Automation, Demand Response Control Systems, and foundational computing infrastructure; ensure work is completed accurately and efficiently; identify, evaluate, and resolve personnel concerns; conduct performance evaluations and enact rewards and discipline if needed; make staffing decisions within unit including the hiring and firing of personnel; maintain and review all unit reports, work records, work specifications, and appropriate documentation; perform other related duties as required.

**MINIMUM REQUIREMENTS:** Bachelor's degree in Information Systems, Computer Science, Engineering, or related field and six (6) years of job-related experience, a minimum of two (2) years managerial experience required [substituting each one (1) year of postsecondary education/training for six (6) months of experience].

<u>License(s)/Certification(s)</u>: A valid, lawful Driver's License is required.

**SELECTION FACTORS:** *Knowledge of:* OT/IT System architecture and design, integration, and operation; datacenter architecture, design and implementation; design and operation of complex virtual computing environments; complex system upgrades/patches; maintenance design and implementation of firewall, switching, and routing infrastructure of field communications; related laws, codes, rules, and regulations governing functions of the position; policies and procedures established for the work system; operations, functions, and terminology

common to the work; and basic English composition, spelling, and grammar. Skill in: performance monitoring, analysis, project management, installation, and reliability monitoring of mission critical control systems required to support the smart grid; use of Linux, Windows, Unix, and Cisco IOS operating systems (advanced level); network delivery and data center communications; data transmission back haul; Automated Meter Infrastructure (AMI) communication protocols such as DNP3, ACS 7000, and IEC 61850; installation and maintenance of optical transmission equipment in a SONET architecture; optical fiber installation delivery and optical ground wire communication (OPGW) installation; daily monitoring of smart grid communications network; daily operation and maintenance of Supervisory Control and Data Acquisition, Automated Metering Infrastructure, Demand Response, and Distribution Automation control systems infrastructure; design and installation of substation communications hardware, fiber, and Wide Area Network radio equipment; termination and splicing of single and multi-mode fiber assets; practicing behaviors with others. Ability to: multitask; work well with third-party contractors while troubleshooting grid communication issues under highly stressful situations; clearly and concisely communicate complex and technical information to executive stakeholders: quickly and accurately perform work; deal with the public in a pleasant, courteous, and calm manner in all circumstances; communicate effectively both verbally and in writing; develop and maintain effective working relationships with the public, coworkers, and superiors; evaluate programs and procedures; exercise independent judgment while evaluating situations and in making determinations; organize assigned work and develop effective work methods; prepare clear, concise, accurate, and informative reports; perform duties in a manner that demonstrates respect, integrity, courtesy, and kindness towards fellow workers, customers, and the general public; and demonstrate a high level of commitment to the principles of positive customer service.

**TOOLS AND EQUIPMENT USED:** Mechanical and motor vehicles, man lifts, hand tools, power tools, ladders, line truck, bucket truck, fiber splicer, communication devices, electronic diagnostic devices, personal computers.

**PHYSICAL DEMANDS:** Requires regularly sitting at a computer for extended time periods, maintaining attention to detail, frequently using telephones and radio, having infrequent breaks, walking, stretching, bending, carrying heavy equipment (20-50 lbs.) and performing other varied physical activities.

**ENVIRONMENTAL FACTORS:** Exposure to adverse weather conditions, electrical solvents, oils and compounds, hazardous environments, heavy traffic, confined areas, electrical systems rated 120 volts to 138,000 volts AC and 125 volts DC, energized electrical equipment, and high-stress situations, including confrontational or uncomfortable contact with the public. *Note: Employees in this class may be subject to on-call status. RESIDENCY: Employees in this class are subject to Provo City residency requirements; they must reside within a 15-mile radius of their primary operations facility to affect a maximum 20-minute response time.* 

Department Director

Mayor/Chief Administrative Officer

1/26/17 Date

9/28/// 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 version.