

CITY OF SPRINGFIELD
JOB DESCRIPTION

Job Title: **Communications Journeyman**
Date: May 14, 2009
Dept/Div: CWLP/Electric/Communications and Controls
Work Location: 1008 East Miller Street
Supervisor: Assistant Superintendent of Communications and Controls
Status: IBEW Local 193
Positions Supervised: N/A
FLSA Status: Nonexempt

JOB SUMMARY

Under general direction assist in developing and implementing system communication and control projects as directed by the Communications crew foreman. This person is also responsible for installation and maintenance required for the fiber optic networks, telephony, SCADA, radio and pager systems, communications systems drawings and documentation and other related communications and controls equipment.

JOB DUTIES

- E 1. Installs and maintains fiber optic system panels and associated equipment, including fiber optic cables, termination of cables, documentation and drawings of cable installation and usage, testing and trouble shooting of fiber optic cables and equipment. Also included is the ability to read and understand schematic drawings, equipment installation and operation manuals, and the proper use of test equipment, software, computers and other tools used to service the fiber optic network and telephony systems. 50%
- E 2. Installs, maintains and repairs radio communications and paging equipment. This includes mobile and handheld radios, base repeaters and stand-alone transmitters, trunking radios, antennas, radio cables and towers, documentation, drawings and record keeping of the radio and paging systems. Also included is the ability to read and understand schematic drawings, equipment instruction and operation manuals, and the proper use of test equipment, software, computers and other tools used to service the radio and paging communications systems. 10%

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| E | 3. | Installs, maintains and repairs System Control And Data Acquisition (SCADA) equipment. This includes Remote Terminal Units (RTU), Master and Backup equipment and operator terminals. Also included is the ability to read and understand schematic drawings, equipment instruction and operation manuals, and the proper use test equipment, software, computers and other tools used to service the SCADA systems. | <u>25%</u> |
| E | 4. | Maintenance and repair of miscellaneous electronic substation and Dispatch equipment. This requirement includes extensive knowledge of electronics, reading schematic diagrams, operating complex test equipment, and other related duties. | <u>5%</u> |
| E | 5. | Operate Division 2 motor vehicles, including a boom truck with a man lift device. This includes pulling a wire trailer, with the ability to properly back the trailer into various locations. | <u>2%</u> |
| E | 6. | Complete daily time sheets, emails and other assigned reports, task reports, etc. as assigned. | <u>3%</u> |
| M | 7. | Performs other communications related duties as assigned by the Communications crew foreman and department supervisor. | <u>5%</u> |

ACCOUNTABILITIES

1. The employee must accept responsibility for timely completion of a variety of jobs, including installation and maintenance of communications equipment panels, two-way radio equipment, SCADA, load frequency equipment, miscellaneous electronic and electrical equipment, and other equipment as directed by the communications crew foreman and department supervisors.
2. The employee must also complete daily reports, time sheets, or other reports as assigned accurately in a timely manner.
3. In all work, the employee must adhere to recognized safety rules and departmental procedures.
4. Perform all other duties assigned by Supervisor.

EQUIPMENT, AIDS & TOOLS

There are many tools that are used in this position. Many hand tools including, but not limited to, such as crimpers, fiber optic cable and wire strippers, cutters, specialty electrical tools. There are also power tools that are used, i.e., hand drills, power saws, vehicles. Also, pencils, calculators, ruler and pen, office equipment, engineering tools

including measuring instruments, personal computers, various test equipment, and communications equipment.

REGULAR CONTACTS

Superintendent of Electric Operations, Assistant Superintendent of Electric Operations, Communications Engineers, Controls Engineer, T&D Engineers, Dispatchers, other CWLP personnel (craft, technical, clerical), outside vendors and contractors, consultants and individuals from other utilities, and commercial customers utilizing CWLP communications services.

WORKING CONDITIONS

The employee must be capable of working in the following conditions:

A. Must be willing to work emergency overtime, including scheduled overtime. This will include callouts at any time, day or night, weekends, holidays included.

B. Must be willing to work emergency work in inclement weather including but not limited to the following conditions:

1. extreme cold, below 0 F
2. extreme heat, above 100 F
3. rain, sleet, hail, snow, wind

C. Must be willing to work in extremely dirty areas, mud, fly ash, in construction areas.

D. Must be willing to work in high noise locations. Per OSHA, HEARING PROTECTION WILL BE PROVIDED FOR EXTREMELY HIGH NOISE LOCATIONS AS NEEDED.

E. Must be willing to work around extremely high voltage.

F. Requires the ability to interact pleasantly and effectively with all regular contacts.

G. Must be able to acquire knowledge of standard safety practices in order to develop and maintain a safe working environment.

H. Have visual ability to perform detailed close work within arms reach.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

This position requires the ability to apply knowledge to work assignments in a logical manner. It also requires the competence to work independently, to be capable of following departmental policies and procedures, and above all, to heed safety policies and practices in the workplace.

Requires a working knowledge of telecommunications systems, methods and protocols including but not limited to standard telephone systems, Ethernet networks, all CWLP fiber optic communications systems including, Synchronous Optic Network (SONET), Optical Carrier One (OC1), Optical Carrier Three (OC3) and Internet Protocol Telephone (IP Telephony) systems, two-way radio systems,

Requires competent working knowledge of personal computers including but not limited to; Microsoft Office software including Outlook, Excel, Visio, and Word. AutoCAD and multiple specialty software programs used for configuration, monitoring, troubleshooting, testing and documenting various communications systems.

Requires a basic knowledge of an electrical transmission and distribution system.

Requires the ability to effectively analyze problems and make sound judgements.

Requires the ability to communicate effectively both orally and in writing.

PHYSICAL REQUIREMENTS

The job requires varied physical requirements. The employee must have the ability to perform physical work as related but not limited to the following:

- A. Climbing: must be able to climb a ladder and some structure in substations.
- B. Balancing: must be able to balance their body on a ladder or structure.
- C. Stooping: must be able to bend the body forward and from side to side at the waist.
- D. Kneeling: must be able to bend the legs at the knees and come to a rest on the knees.
- E. Crouching: must be able to bend the body downward and forward by bending leg and forward bending leg and spine.
- F. Crawling: must be able to move about on hands and knees or hands and feet.
- G. Reaching: must be able to extend hand(s) and arm(s) in any direction.

H. Standing: must be able to stand for sustained periods of time.

I. Walking: must be able to move about on feet to accomplish tasks, some times for long distances.

J. Pushing: must be able to use upper extremities to press with steady force in order to thrust forward, downward, or outward.

K. Pulling: must be able to use upper extremities to exert force in order to draw, drag, haul, or tug objects in a sustained motion.

L. Lifting: must be able to raise objects from a lower to a higher position or move objects horizontally from position to position.

M. Fingering: must be able to pick, pinch, or otherwise manipulate small objects or pieces primarily with the fingers rather than with the whole hand or arm as in handling.

N. Grasping; must be able to apply pressure to an object with the fingers and palm.

O. Talking: must be able to express or exchange ideas by means or the spoken word; convey detailed or important instructions to other workers accurately, loudly, or quickly.

P. Hearing: must perceive the nature of sounds, with or without correction; receiving detailed information through oral communication, making fine discriminations in sound.

Q. Repetitive Motions: must be able to maintain substantial movements (motions) of the wrists, hands, and fingers.

R. Sight: must have vision correctable to 20/20.

MENTAL REQUIREMENTS

There is an extreme amount of responsibility that goes with this position and the person filling this spot must be able to use logical thinking when tackling any job or problem. Since there is always the possibility of personal harm in the work area, the person filling this position must be responsible and alert in their work habits.

TRAINING AND EXPERIENCE

This position is covered under a labor agreement between the City of Springfield and I.B.E.W. LU 193 and as such, requires an approved apprenticeship as prescribed by the U.S. Department of Labor.

It should be noted that this job is highly technical and requires a minimum of four years of experience. As such, the person should have a working knowledge of electronics and an ability to work with formulae relating to the electrical and electronic fields.

ADDITIONAL REQUIREMENTS

This position is covered under a labor agreement between the City of Springfield and I.B.E.W. LU 193 and as such, can only be occupied by a journeyman electrician. The position also requires possession of a valid Illinois drivers license, class "B" or higher.