

## **CITY OF SPRINGFIELD** JOB DESCRIPTION

JOB TITLE: Communication		tions Journeyman	DATE:	November 8, 2021
<b>DEPT/DIV:</b>	CWLP Elect	ric Div. Comm. & Controls	LOCATION:	Miller Street
SUPERVISOR: Maintenance		Supervisor	STATUS:	IBEW 193
POSITIONS SUPERVISED:		Apprentices		-

JOB SUMMARY: Under general direction, assists in developing and implementing system communications and control projects as directed by the Communications crew foreman. Responsible for installation and maintenance of fiber optic networks, telephony, SCADA, radio, AMR/AMI and paging systems, communications system drawings and documentation as it relates to communications and controls equipment.

### JOB DUTIES AND ACCOUNTABILITIES:

<b>E/M</b> E	<b>Description</b> 1. Installs and maintains fiber optic systems including but not limited to cables, splices, terminations, panels, documentation and drawings of cable installation and usage, testing, and troubleshooting of fiber optic cables and equipment. Ability to read and understand schematics, equipment installation and operation manuals, and the proper use of sophisticated test equipment, software, computers, and other tools used to service the fiber optic network and telephony systems.	<b>% Time</b> 45
E	2. Installs, maintains, configures, and troubleshoots the SEL ICON system. Ability to read and understand schematics, equipment installation, and operation manuals and the proper use of sophisticated test equipment, software, computers and other tools used to service the ICON systems. Ability to understand the interaction with the various pieces of Relay Department hardware that interface with the ICON system. Ability to keep detailed documentation and drawings.	15
Е	3. Installs, maintains, and repairs System Control and Data Acquisition (SCADA) equipment. This includes but is not limited to Remote Terminal Units (RTUs), COMM Switches, and analog modems. Ability to read and understand schematics, equipment installation and operation manuals, and the proper use of sophisticated test equipment, software, computers, and other tools used to service the SCADA systems. Ability to keep detailed documentation and drawings.	15
Е	4. Installs, maintains, configures and repairs radio system and paging system equipment, including but not limited to mobile and handheld radios, base station repeaters, and stand-alone transmitters, antennas, various cabling and towers. Ability to keep detailed documentation and drawings. Ability to read and understand schematics, equipment installation and operation manuals, and the proper use of sophisticated test equipment, software, computers, and other tools used to service various radio and paging systems.	10

- E 5. Maintains and repairs miscellaneous electronic substation and dispatch equipment. Ability to read and understand schematics, equipment installation and operation manuals, along with proper use of sophisticated test equipment, software, computers, and other tools.
- M 6. Operates Division 2 motor vehicles, including a boom truck with a man lift device; includes pulling a wire cart and/or splice trailer, with the ability to properly back the trailer into various locations.
- E 7. Completes daily time sheets and tasks, responds to and generates emails, and performs other communications related duties as assigned.

#### **EQUIPMENT, AIDS, AND TOOLS:**

Hand tools including, but not limited to, crimpers, fiber optic cable and wire strippers, cutters, and specialty electrical tools; power tools such as drills, angle grinders, reciprocating saws; welding equipment; shop tools such as metal shear and brake; motor vehicle; fork truck, pencils, calculators, ruler and pen, office equipment, engineering tools including measuring instruments, personal computers, various test equipment, and communications equipment.

#### **REGULAR CONTACTS:**

Communications Dept. Maintenance Supervisor, Superintendent of Substation Engineering, 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:**

Position requires the ability to work both scheduled and emergency overtime. This will include calls at any time, day or night, weekends and holidays included.

Work is performed in inclement weather including, but not limited to, extreme cold (below 0 degree), extreme heat (above 100 degree) and in rain, sleet, hail, snow and wind.

Work is performed in extremely dirty areas, mud, fly ash, wet and construction areas.

Work is performed in high noise locations.

Subject to vibration of the extremities or whole body.

Work is performed around extremely high voltage.

#### 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 procedures, and 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, and all CWLP fiber optic communications systems including: SEL ICONS, SONET, Optical Carrier One and Three, Internet Protocol Telephone, and two-way radio systems.

Requires competent working knowledge of personal computers including but not limited to; Microsoft Office software, 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:

Ability to climb a ladder and structures in the substations.

Ability to balance on a ladder or structure.

Ability to lift 50 lbs. frequently.

Must have vision correctable to 20/20 and the ability to discern colors (must not be color-blind). Ability to work in high noise locations and wear required hearing protection, provided by CWLP. Ability to work safely around extremely high voltage.

#### TRAINING AND EXPERIENCE/MENTAL REQUIREMENTS:

Requires knowledge, skill and mental development equivalent to the completion of a high school diploma or GED, completion of an approved apprenticeship as prescribed by the U.S. Department of Labor, and a minimum of four years of Journeyman Electrician experience.

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.

### ADDITIONAL REQUIREMENTS:

Requires possession of a valid driver's license, Class B or higher.

Y	N			
	$\boxtimes$	1. The employee customarily and regularly directs the work of at least two other employees.		
	$\boxtimes$	2. The employee makes recommendations as to hiring, firing, promotion, or disciplinary action of other employees.		
		3. The employee plans and apportions work, monitors performance, and determines techniques/resources to be used by other employees.		
If all of (1), (2), and (3) are checked "yes", the position is exempt. Otherwise, continue with remaining questions.				
	$\boxtimes$	4. The employee customarily and regularly exercises discretion and independent judgment.		
$\boxtimes$		5. The employee devotes less than 20% of his/her workweek to non-exempt duties (e.g., typing, data entry, posting accounts, etc.).		
$\boxtimes$		<ol> <li>The employee performs under only general supervision, and/or works along specialized or technical lines requiring specialized training, experience, or knowledge.;</li> </ol>		
		If all of (4), (5), and (6) are checked "yes", the position is exempt.		
Supe	rviso	r Approval: PAUL BULPITT Digitally signed by PAUL BULPITT Date: 2021.11.17 14:30:28-06:00'  Date:		
Direc	ctor A	Approval:Rogers, Scott Days 18/15 Scott Doug Brown Digitally signed by Rogers, Scott Doug Brown Date: 2021.11.18 69/324.99-06000 Date: 2021.11.18 69/324.99-06000 Date:		
Hum	an R	Approval: Rogers, Scott Dues 2011/1002914-6000 Doug Brown Dues 2011/10092449-0000 Date:		

# POSITION ATTRIBUTE WORKSHEET

JOB TITLE: Journeyman

# 1. PHYSICAL ACTIVITY

	ATTRIBUTE	DUTIES	% Time
A.	<b>CLIMBING:</b> Ascending or descending ladders, stairs, scaffolding, ramps, poles, etc., using feet and legs and/or hands and arms. Body agility is emphasized. Important if the amount and kind of climbing exceeds that required for ordinary locomotion.	1,2,5,6	5
В.	<b>BALANCING:</b> Maintaining body equilibrium to prevent falling when walking, standing, or crouching. Important if the amount and kind of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.	1,2,5,6	5
C.	<b>STOOPING:</b> Bending body downward and forward by bending spine at the waist. Important if it occurs to a considerable degree and requires full use of the lower extremities and back muscles.	1,2,5,6	5
D.	KNEELING: Bending legs at knee to come to a rest on knee or knees.	1,2,3,5,6	5
E.	<b>CROUCHING:</b> Bending the body downward and forward by bending leg and forward bending leg and spine.	1,2,3,5,6	5
F.	CRAWLING: Moving about on hands and knees or hands and feet.	1,2,5	5
G.	<b>REACHING:</b> Extending hand(s) and arm(s) in any direction.	1,2,5,6	10
H.	STANDING: Particularly for sustained periods of time.	1,2,3,5,6	20
I.	<b>WALKING:</b> Moving about on feet to accomplish tasks, particularly for long distances.	1,2,5,6	15
J.	<b>PUSHING:</b> Using upper extremities to press with steady force in order to thrust forward, downward or outward.	1,2,5	10
K.	<b>PULLING:</b> Using upper extremities to exert force in order to draw, drag, haul or tug objects in a sustained motion.	1,2,3,5	10
L.	<b>LIFTING:</b> Raising objects from a lower to a higher position or moving objects horizontally from position to position. Important if it occurs to a considerable degree and requires substantial use of the upper extremities and back muscles.	1,2,3,5,6	10
M.	<b>FINGERING:</b> Picking, pinching, typing or otherwise working, primarily with the fingers rather than with the whole hand or arm as in handling.	1,2,3,4,5,6,7	15
N.	<b>GRASPING:</b> Applying pressure to an object with the fingers and palm.	1,2,3,5,6,7	20
O.	<b>FEELING:</b> Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of the fingertips	1,2,3,4,5,6,7	10
P.	<b>TALKING:</b> Expressing or exchanging ideas by means of the spoken word; conveying detailed or important spoken instructions to other worker accurately, loudly, or quickly.	1,2,3,4,5,6	20
Q.	<b>HEARING:</b> Perceiving the nature of sounds, with or without correction; receiving detailed information through oral communication, making fine discriminations in sound.	1,2,3,4,5,6,7	20
R.	<b>REPETITIVE MOTIONS:</b> Substantial movements of the wrists, hands, and/or fingers.	2,3,4,6	20

### 2. PHYSICAL MODE - SELECT ONE **LEVEL ATTRIBUTE** SEDENTARY WORK: Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects, including the human body. Sedentary work involves sitting most of the time. LIGHT WORK: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force B. frequently, and/or negligible amount of force constantly to move objects. Use of arm and/or leg controls with exertion greater than Sedentary Work and the worker sits most of the time. MEDIUM WORK: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force M C. constantly to move objects. **HEAVY WORK:** Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force D. constantly to move objects. VERY HEAVY WORK: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 E. pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects. VISUAL REQUIREMENT - SELECT ONE 3. LEVEL **ATTRIBUTE** Level A is typical of CLERICAL, ADMINISTRATIVE, MACHINE OPERATION, CLOSE M ASSEMBLY, INSPECTION: Minimum standard for those preparing and analyzing data and figures, such as transcription, computer terminal, extensive reading, visual inspection involving small defects, small parts, operation of machines, (including inspection), using measurement devices, assembly or fabrication of parts at distances close to the eyes. Level B is typical of MACHINE OPERATORS (without inspection), MECHANICS, SKILLED TRADESPEOPLE: Minimum standard for those working with machines such as lathes, drill presses, power saws and mills where the seeing job is at or within arm's reach and those who do work of a nonrepetitive nature such as carpenters, technicians, service people, plumbers, painters, mechanics, etc. Level C is typical of MOBILE EQUIPMENT OPERATORS: Minimum standard for those who operate cars, trucks, forklifts, cranes, and high lift equipment. OTHER: Minimum based on the criteria of accuracy and neatness of work for janitors, sweepers, etc. MENTAL CAPABILITY REQUIREMENTS - SELECT ONE 4. ATTRIBUTE LEVEL

	ATTRIBUTE	
A.	Performs repetitive tasks following simple instructions.	
B.	Performs a variety of simple tasks following instructions provided.	
C.	Performs tasks requiring independent knowledge in addition to procedures or instructions provided.	$\boxtimes$
D.	Performs complex tasks requiring independent knowledge and its application to non-routine situations.	
E.	Performs highly complex and varied tasks requiring independent knowledge, its application to a variety of situations, as well as exercise of independent judgment.	

# 5. WORKING CONDITIONS - CHECK ALL THAT APPLY

	ATTRIBUTE	ITEM
A.	Subject to inside environmental conditions; protected from weather conditions, some temperature changes.	$\boxtimes$
B.	Subject to outside environmental conditions.	$\boxtimes$
C.	Subject to both inside and outside environmental conditions.	$\boxtimes$
D.	Subject to extreme cold; temperature below 32 degrees for periods of more than one hour.	$\boxtimes$
E.	Subject to extreme heat: temperatures above 100 degrees for periods of more than one hour. Note if seasonal or process related.	$\boxtimes$
F.	Subject to noise sufficient to cause the worker to shout in order to be heard.	$\boxtimes$
G.	Subject to vibration of the extremities or whole body.	$\boxtimes$
H.	Subject to hazards such as proximity to moving parts, electrical current, working on scaffolding and high places, or exposure to chemicals.	$\boxtimes$
I.	Subject to conditions that affect the respiratory system or the skin such as fumes, odors, dusts, mists, gases or poor ventilation.	$\boxtimes$
J.	Subject to oils or other cutting fluids.	$\boxtimes$
K.	Required to wear respirator.	
L.	Not substantially exposed to adverse environmental conditions (such as in typical office or administrative work).	

# 6. <u>COMMENTS/NOTES</u>