



**CITY OF SPRINGFIELD  
JOB DESCRIPTION**

<b>JOB TITLE:</b>	Relay Journeyman	<b>DATE:</b>	November 13, 2014
<b>DEPT/DIV:</b>	CWLP Substation Maintenance - Electric Div.	<b>LOCATION:</b>	Groth Street
<b>SUPERVISOR:</b>	Maintenance Supervisor	<b>STATUS:</b>	IBEW 193
<b>POSITIONS SUPERVISED:</b>	Apprentices		

**JOB SUMMARY:** Under general supervision, performs installation and maintenance duties relating to high-voltage generation, transmission, substation and distribution protection systems. Performs safe and accurate testing of protective relays, Power Line Carrier (PLC) equipment, and other related substation equipment.

**JOB DUTIES AND ACCOUNTABILITIES:**

<b>E/M</b>	<b>Description</b>	<b>% Time</b>
E	1. Installs and maintains protective relay panels, physically positions new panels, installs new control wiring and devices, and accurately tests and commissions circuits.	25
E	2. Installs control cable external to the panels which includes accessing manholes. Terminates control cables in relay panels and substation equipment. Equipment can be found inside or outside and can be at extended heights.	15
E	3. Maintains and repairs protective relay equipment, which includes reading electrical schematics, operating complex test equipment, and accurately documenting test results.	25
E	4. Designs and interprets electrical control schematic drawings and updates and maintains drawings using computer drafting software.	10
E	5. Installs and maintains inside and outside PLC equipment, which includes reading detailed schematic drawings, reading instruction books for the equipment, and performing complete testing of the line traps, line tuning units and hybrids.	5
E	6. Performs current transformer testing using automated test equipment and documents results. Equipment is typically outside and can be at extended heights.	5
E	7. Operates motor vehicles, including a boom truck with manlift device. Tows a 15,000 lb. wire trailer and backs the trailer into various locations.	5
M	8. Maintains and repairs miscellaneous electronic substation equipment.	5
M	9. Performs other duties as required or assigned.	5

**EQUIPMENT, AIDS, AND TOOLS:**

Hand tools including, but not limited to, wire cutters, wire strippers, wire crimpers, screwdrivers, nut drivers and specialty electrical tools; power tools such as drills, angle grinders, and reciprocating saws; welding equipment; shop tools such as metal shear and brake; motor vehicle; and fork truck.

**REGULAR CONTACTS:**

Relay Maintenance Supervisor, Relay Engineer, Substation Maintenance Supervisor, Substation Engineer, System Dispatcher, System Operator, Service Foreman-Relay, Service Foreman-Substation, Service Foreman-Communications, Journeyman-Relay, Journeyman-Substation, Journeyman-Communications, Apprentice-Relay, Apprentice-Substation, and Apprentice-Communications.

**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 deg), extreme heat (above 100 deg) 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:**

Ability to apply knowledge to work assignments in a logical manner.

Ability to work independently, responsibly, and alertly.

Ability to follow departmental policies and procedures.

Ability to heed safety policies and practices in the workplace.

Working knowledge of algebra and trigonometry.

Ability to supervise and motivate apprentice employees.

Extensive working knowledge of electronics, electrical schematic reading, and operating complex test equipment.

Ability to operate a motor vehicle and fork truck.

Ability to operate a computer and general office equipment.

Ability to use logical thinking when tackling any job or problem.

**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.

**ADDITIONAL REQUIREMENTS:**

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

FLSA STATUS: Exempt  Non-exempt

Y	N	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. The employee customarily and regularly directs the work of at least two other employees.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. The employee makes recommendations as to hiring, firing, promotion, or disciplinary action of other employees.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. The employee plans and apportsions 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.		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. The employee customarily and regularly exercises discretion and independent judgment.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. The employee devotes less than 20% of his/her workweek to non-exempt duties (e.g., typing, data entry, posting accounts, etc.).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. The employee performs under only general supervision, and/or works along specialized or technical lines requiring specialized training, experience, or knowledge.;
If all of (4), (5), and (6) are checked "yes", the position is exempt.		

Supervisor Approval:  \_\_\_\_\_

Digitally signed by Gregory P Yakle  
DN: cn=Gregory P Yakle, o, ou,  
email=Greg.Yakle@CWLP.com, c=US  
Date: 2014.12.26 09:34:24 -0600

Date: RECEIVED

Director Approval:  \_\_\_\_\_

Date: DEC 29 2014

Human Resources Approval: Melina Branas-Collins

Date: 1/2/2015

## 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
B. <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. <b>KNEELING:</b> 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. <b>CRAWLING:</b> 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. <b>STANDING:</b> 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

	ATTRIBUTE	LEVEL
A.	<b>SEDENTARY WORK:</b> 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.	<input type="checkbox"/>
B.	<b>LIGHT WORK:</b> Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force 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.	<input type="checkbox"/>
C.	<b>MEDIUM WORK:</b> Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force constantly to move objects.	<input checked="" type="checkbox"/>
D.	<b>HEAVY WORK:</b> Exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force constantly to move objects.	<input type="checkbox"/>
E.	<b>VERY HEAVY WORK:</b> Exerting <i>in excess</i> of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.	<input type="checkbox"/>

3. VISUAL REQUIREMENT – SELECT ONE

	ATTRIBUTE	LEVEL
A.	Level A is typical of <b>CLERICAL, ADMINISTRATIVE, MACHINE OPERATION, CLOSE ASSEMBLY, INSPECTION:</b> 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.	<input checked="" type="checkbox"/>
B.	Level B is typical of <b>MACHINE OPERATORS</b> (without inspection), <b>MECHANICS, SKILLED TRADESPEOPLE:</b> 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 non-repetitive nature such as carpenters, technicians, service people, plumbers, painters, mechanics, etc.	<input type="checkbox"/>
C.	Level C is typical of <b>MOBILE EQUIPMENT OPERATORS:</b> Minimum standard for those who operate cars, trucks, forklifts, cranes, and high lift equipment.	<input type="checkbox"/>
D.	<b>OTHER:</b> Minimum based on the criteria of accuracy and neatness of work for janitors, sweepers, etc.	<input type="checkbox"/>

4. MENTAL CAPABILITY REQUIREMENTS – SELECT ONE

	ATTRIBUTE	LEVEL
A.	Performs repetitive tasks following simple instructions.	<input type="checkbox"/>
B.	Performs a variety of simple tasks following instructions provided.	<input type="checkbox"/>
C.	Performs tasks requiring independent knowledge in addition to procedures or instructions provided.	<input checked="" type="checkbox"/>
D.	Performs complex tasks requiring independent knowledge and its application to non-routine situations.	<input type="checkbox"/>
E.	Performs highly complex and varied tasks requiring independent knowledge, its application to a variety of situations, as well as exercise of independent judgment.	<input type="checkbox"/>

5. **WORKING CONDITIONS – CHECK ALL THAT APPLY**

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

6. **COMMENTS/NOTES**