

## **Apprentice Lineworker**

The South Hadley Electric Light Department (SHELD), a municipal electric utility company with 8,000 customers and over a century of service to the people of South Hadley, is seeking a qualified Apprentice Lineworker who will be responsible for developing the technical skills necessary to perform a variety of functions related to the construction, installation and maintenance of underground and overhead high and low voltage electrical distribution systems. Incumbent will apply basic knowledge of electricity to work performed.

### **Position Responsibilities:**

1. Participate in a formal forty-eight (48) month Lineworker Apprentice Program administered by the Northeast Public Power Association with the goal of completing the program within the time allotted to progress to First Class Lineworker status.
2. Serve as an apprentice member in a team effort to construct, install and maintain underground and overhead lines, transformers, and associated equipment.
3. Develop skills necessary to operate a variety of electrical construction equipment and vehicles.
4. Successfully obtain a Massachusetts 1B Hoisting License.
5. Develop skills necessary for compliance with environmental regulations and procedures, including but not limited to spill reporting and response, waste management, oil spill prevention, transportation of hazardous materials and waste.
6. Maintain records, logs, and work reports of daily and off-hour work.
7. Work required overtime as needed and be available for emergency call-in.
8. Must live within a reasonable driving distance and be able to report to work within 30 minutes as defined in the Union contract.
9. Work on fiber optic project and plant construction, installation as directed.

**Physical and Mental Requirements:** Apprentice Lineworker must be able to: work easily and skillfully with hands; climb and maintain balance on ladders, utility poles and in other elevated positions; see well (naturally or with correction) and to distinguish colors; reach for and handle and grasp wires and hand tools; bend, crouch, and work in small spaces; coordinate the use of eyes and hands or fingers; and lift and carry objects weighing up to fifty (50) pounds. Must have ability to work in extreme weather conditions, to work effectively and safely under pressure and in stressful situations. See Job Task Analysis Physical Demands Checklist for Lineworker. Must be available for emergency call-in which can be any time of day, any day of the year.

### **Qualifications:**

Education: High School diploma or GED

Licenses: Class A or Class B Massachusetts Commercial Driver's License and ability to obtain a Massachusetts 1B Hoisting License.

Experience: The ability to demonstrate electrical knowledge through technical schooling or prior experience.

References: Excellent references to attest to attitude, conduct, work ethic, and work habits.

**Job Knowledge/Skills Required:**

1. Position requires incumbent to drive commercial vehicles, pass and maintain a Department of Transportation (DOT) Physical. Random drug/alcohol testing is required.
2. Position requires the incumbent to speak, write, spell, understand and communicate in English.
3. Position requires the incumbent to possess knowledge of safety rules/codes and work practices and possess an understanding that safety comes before everything else.
4. Familiarity with OSHA 1910.269 requirements, National Electrical Safety Code, APPA Safety Manual, National Electrical Code sections pertaining to utility work.
5. Position requires the incumbent to demonstrate the ability for professional growth and improvement and display an excellent attitude, conduct, work ethic, and work habits.
6. The position begins with a probationary period and is based upon successful completion. Thereafter, a mandatory evaluation by the Operations Manager and Director of Operations will determine if the candidate has the attitude and aptitude to move forward in the Apprentice Lineworker program.

This is a full-time position with excellent benefits including a Massachusetts Public Employee Pension Plan.

Qualified candidates can apply for this position by submitting a cover letter and resume via email to [kmendoza@sheld.org](mailto:kmendoza@sheld.org) , Kim Mendoza at South Hadley Electric Light Department.



## ELECTRICAL LINEMAN - JOB TASK ANALYSIS – PHYSICAL DEMANDS CHECKLIST

| Posture, Movement:    | N<br>0% | O<br>1 –<br>33% | F<br>34 –<br>66% | C<br>67 –<br>100% | Comments   |
|-----------------------|---------|-----------------|------------------|-------------------|--|
| Sitting               |         | ✓               |                  |                   | Driving to specific locations, sitting at conjunction box to replace loadbreak elbow connectors  |
| Standing              |         |                 | ✓                |                   | To shovel, make repairs, make attachments, stand in bucket, operate machinery  |
| Walking               |         | ✓               |                  |                   | From truck to work location, around work area, in operations center  |
| Climbing - Ladder     |         | ✓               |                  |                   | Using ladders for hard-to-reach locations, entering and exiting manholes   |
| Climbing- Stairs      |         | ✓               |                  |                   | Climbing in and out of truck, within operations center   |
| Crawling              |         | ✓               |                  |                   | May be required in and around vehicles   |
| Crouching             |         | ✓               |                  |                   | Manhole work may necessitate   |
| Balancing             |         | ✓               |                  |                   | Standing within the bucket, on ladders, or when working in potentially wet/muddy/icy condition   |
| Bending & Stooping    |         | ✓               |                  |                   | Picking up objects, applying lubricants, to assemble parts, if in bucket - receiving objects from ground man, attaching elbow connectors to conjunction box, tool use, etc.  |
| Pushing & Pulling     |         | ✓               |                  |                   | Pushing items up to person in bucket, pushing/pulling wires/cables from/to conjunction box   |
| Kneeling & Squatting  |         | ✓               |                  |                   | Read labels/tie rope to conjunction box to hold up cables, potentially done in wet, muddy, or wet conditions   |
| Reaching -Forward     |         |                 | ✓                |                   | While working within the bucket  |
| Reaching - Overhead   |         |                 | ✓                |                   | While working within the bucket, working in a manhole, reaching to hand objects to employee in bucket  |
| Lifting & Carrying    |         | ✓               |                  |                   | Lifting objects/tools from the ground or off the truck. Carrying tools and other objects to work location from truck, in bucket, or to other work sites  |
| Operating Controls    |         | ✓               |                  |                   | Truck driving or operating bucket movements  |
| Object Handling       |         |                 | ✓                |                   | Handling tools and a variety of equipment when completing various tasks  |
| Fingering             |         |                 | ✓                |                   | Screwing/unscrewing nuts/bolts/screws - gloves are thick and cause fingers and wrists to fatigue quickly   |
| Feeling               |         | ✓               |                  |                   | Feeling for objects in hard to reach or dimly lit areas  |
| Simple Hand Grasping  |         |                 | ✓                |                   | Fastening screws, nuts, bolts, etc. Handling various tools, working in bucket - protective gloves  |
| Firm Hand Grasping    |         |                 | ✓                |                   | Using larger tools, handling heavier objects, lifting cross arm, air flow fan, tripod rescue assembly, pulling cables/wires  |
| Twisting              |         | ✓               |                  |                   | While doing work within the bucket (above ground) or using their body to apply their body to apply appropriate torque/force into removing old cable parts (underground)  |
| Sensory:              | N<br>0% | O<br>1 –<br>33% | F<br>34 –<br>66% | C<br>67 –<br>100% | Comments   |
| Vision-Far:           |         |                 | ✓                |                   | Driving/walking to various locations, operate bucket truck   |
| Vision - Near:        |         |                 | ✓                |                   | Using tools, making attachments, securing adaptors, working in bucket, operating bucket truck, reading labels, etc.  |
| Depth Perception:     |         |                 | ✓                |                   | Walking and driving over changing terrains to various locations around various obstacles, aligning loadbreak elbow connectors for assembly, telephone wire repair/replacement, doing work while elevated in bucket-truck, operating bucket |
| Color Discrimination: |         | ✓               |                  |                   | Traffic signs and signals, types of wiring   |

| Sensory cont.  | N<br>0% | O<br>1 -<br>33% | F<br>34 –<br>66% | C<br>67 –<br>100% | Comments   |
|--|---------|-----------------|------------------|-------------------|--|
| Field:   |         |                 | ✓                |                   | Walking and driving over changing terrains to various locations around various obstacles, aligning loadbreak elbow connectors for assembly, wire repair/replacement, doing work while elevated in bucket-truck, operating bucket           |
| Accommodation:   |         |                 | ✓                |                   | Walking and driving over changing terrains to various locations around various obstacles, aligning loadbreak elbow connectors for assembly, telephone wire repair/replacement, doing work while elevated in bucket-truck, operating bucket |
| Perception-Spatial:  |         |                 | ✓                |                   | Driving/walking to various locations, working in the bucket at high heights, operating bucket truck, working down in the manhole   |
| Perception-Form:   |         |                 | ✓                |                   | Tool use, use of shotgun stick/utility stick, cables and grounds, chain hoists, grips, working in the bucket, identify various terrain types, operating controls of bucket   |
| Feeling:   |         | ✓               |                  |                   | Feeling for the controls of the bucket truck, to locate smaller tools or supplies in dimly lit areas   |
| Speaking:  |         |                 | ✓                |                   | To other co-workers, customers, possibly other workers at the repair site (other company personnel, traffic control officers, city officials, etc.)  |
| Environment:   | N<br>0% | O<br>1 -<br>33% | F<br>34 –<br>66% | C<br>67 –<br>100% | Comments   |
| Inside Environment:  |         | ✓               |                  |                   | Approximately 20 minutes (or longer depending on the day) at the beginning and the end of every workday spent inside the temperature-controlled Operations center  |
| Weather Conditions:  |         |                 |                  | ✓                 | Outdoors for 8 hours. Possible daily exposure to temperature extremes and/or precipitation   |
| Temperature:   |         |                 |                  | ✓                 | New England weather climate: temperatures change daily   |
| Cold:  |         |                 |                  | ✓                 | Fall/Winter: Temperature ranges from sub-zero to 50 degrees. October-May   |
| Heat:  |         |                 |                  | ✓                 | Spring/Summer: Temperature ranges from 50-100 degrees. May-September   |
| Wet/ Humidity:   |         |                 |                  | ✓                 | Rain or snow conditions possible. Summer months are quite humid  |
| Biological Agents:   | ✓       |                 |                  |                   |  |
| Human Body Fluids:   | ✓       |                 |                  |                   |  |
| Chemicals:   |         | ✓               |                  |                   | Paints/Equipment cleaning agents   |
| Hazardous Materials:   |         |                 | ✓                |                   | Electrical wiring - possibility of getting electrocuted or burned  |
| Floor Surface:   |         |                 |                  | ✓                 | Asphalt, grass/dirt, or concrete flooring of the operations center   |
| Lighting:  |         |                 |                  | ✓                 | Sunlight or building lighting  |
| Vibration:   |         | ✓               |                  |                   | Driving or working in bucket truck   |
| Unprotected Heights:   |         | ✓               |                  |                   | Working in bucket trucks during telephone pole repair or other jobs, working on ladders to repair electrical wiring, etc.  |
| Confined / Cluttered:  |         | ✓               |                  |                   | Working down in a manhole or up in a bucket  |
| Moving Equipment:  |         | ✓               |                  |                   | Various tools or objects handled daily   |
| Insect / Animal Contact  |         | ✓               |                  |                   | Potential for disturbing a hornet's/wasp nest within a streetlamp or telephone pole. Animals such as birds and/or squirrels may come in contact while working up in the bucket   |
| *Frequency performed per shift:                      N = Not Present (0%)   O = Occasional (1 – 33%                      F = Frequent (34 – 66%)   C = Constant (67 – 100%)<br>Repetition Based Determination (multiply reps. by #-hrs. worked)                      1 - 4 reps./ hr.                      5 - 24 reps./ hr.                      :>25 reps./hr. |         |                 |                  |                   |  |

## OBJECT HANDLING

### LIFT

Description of Object: Chain hoist, grips, chain saw, ratchet cutters, bolt cutters, shot-gun stick, utility stick, shovels, tool kit, load break, drill, hydraulic hose, come-a- longs and slack, grounds, wire shields, ladders, climbing gear, cross arms, cutouts, wires and cables, anchors , rubber gloves, cones, battery operated lug compressor, loadbreak elbow connectors, underground wire/cable, air flow fan, spool of rope, tripod rescue assembly, pliers, wire cutters, tape measure, razor cutter, safety harnesses. Max weight: 50 pounds. Height To / From: Ground to Overhead.

| Weight (lbs.) | Frequency* | Repetitions/ Time | Height To/ From    | Description of Objects  |
|---------------|------------|-------------------|--------------------|---|
| 0 – 10        | Frequent   | 5-30x/day         | Ground to overhead | Chain hoist, grips, ratchet cutters, bolt cutters, shotgun stick, utility stick, non-weighted shovels, come-a-longs, load break, cutouts, cones, pliers, wire cutters, tape measure, grounds, wire shields, load break elbow connectors, razor cutter, anchors, rubber gloves, various wires and cables |
| 11 – 20       | Occasional | 5-15x/day         | Ground to shoulder | Chain saw, hydraulic drill, various wires/cables, grounds, weighted shovels, battery operated lug compressor  |
| 21 – 35       | Occasional | 3-10x/day         | Ground to shoulder | Various wires/cables, air flow fan, tripod rescue assembly -crank, grounds, shovel w/ dirt (depends on type of job- underground/above ground)   |
| 36 – 50       | Occasional | 5-10x/day         | Ground to waist    | Cross arm, underground cables   |
| 51 – 75       | Never      |                   |                    |   |
| 76 – 100      | Never      |                   |                    |   |
| > 100         | Never      |                   |                    |   |

| <b>CARRY</b>  | Max Weight Carried (1RM): 50lbs |                  | Distance: 0-30'    | Description of Object: Same as above  |
|---------------|---------------------------------|------------------|--------------------|---|
| Weight (lbs.) | Frequency*                      | Repetitions/Time | Distance           | Description of Objects  |
| 0 – 10        | Frequent                        | 5-30x/day        | Ground to overhead | Chain hoist, grips, ratchet cutters, bolt cutters, shotgun stick, utility stick, non-weighted shovels, come-a-longs, load break, cutouts, cones, pliers, wire cutters, tape measure, grounds, wire shields, load break elbow connectors, razor cutter, anchors, rubber gloves, various wires and cables |
| 11 – 20       | Occasional                      | 5-15x/day        | Ground to shoulder | Chain saw, hydraulic drill, various wires/cables, grounds, weighted shovels, battery operated lug compressor  |
| 21 – 35       | Occasional                      | 3-10x/day        | Ground to shoulder | Various wires/cables, air flow fan, tripod rescue assembly - crank, shovel w/ dirt  |
| 36 – 50       | Occasional                      | 5-10x/day        | Ground to waist    | Cross arm, underground cables   |
| 51 – 75       | Never                           |                  |                    |   |
| 76 – 100      | Never                           |                  |                    |   |
| > 100         | Never                           |                  |                    |   |

\*Frequency performed per shift: N = Never (0%) 0 = Occasional (1 - 33%) F = Frequent (34 - 66%) C = Constant (67 - 100%)

| OBJECT HANDLING  |                               |                   |                |  |
|--|-------------------------------|-------------------|----------------|--|
| <b>PUSH</b>  |                               |                   |                |  |
| Description of Object: Hydraulic drill, chain saw, loadbreak elbow connectors, underground wires (in manhole), (cross arm and various other objects are passed from the ground to the "bucket man" via overhead transfer/push press). Max Force Pushed (1RM): 50lbs. Distance 0-5' |                               |                   |                |  |
| Weight (lbs.)  | Frequency*                    | Repetitions/ Time | Distance       | Description of Objects   |
| 0 – 10   | Frequent                      | 30x/day           | 1-12"          | Torque application to various tools (wrenches, bolt / wire / ratchet cutters)                                    |
| 11 – 20  | Occasional                    | 20x/day           | 1-12"          | Torque application to various tools (wrenches, bolt / wire / ratchet cutters), chain saw, hydraulic drill, drill |
| 21 – 35  | Occasional                    | 5-15x/day         | 0-5'           | Various cables/wiring, underground cables  |
| 36 – 50  | Occasional                    | 5-15x/day         | 0-5'           | Cross arm, various cables/wiring, underground cables   |
| 51 – 75  | Never                         |                   |                |  |
| 76 – 100   | Never                         |                   |                |  |
| > 100  | Never                         |                   |                |  |
|  |                               |                   |                |  |
| <b>PULL</b>  | Max Force Pulled (1RM): 50lbs |                   | Distance: 0-5' | Description of Object: Same as above   |
| Weight (lbs.)  | Frequency*                    | Repetitions/Time  | Distance       | Description of Objects   |
| 0 – 10   | Frequent                      | 30x/day           | 1-12"          | Torque application to various tools (wrenches, bolt / wire / ratchet cutters)                                    |
| 11 – 20  | Occasional                    | 20x/day           | 1-12"          | Torque application to various tools (wrenches, bolt / wire / ratchet cutters), chain saw, hydraulic drill, drill |
| 21 – 35  | Occasional                    | 5-15x/day         | 0-5'           | Various cables/wiring, underground cables, detaching loadbreak elbow connectors for replacement                  |
| 36 – 50  | Occasional                    | 5-15x/day         | 0-5'           | Cross arm, various cables/wiring, underground cables, detaching loadbreak elbow connectors for replacement       |
| 51 – 75  | Never                         |                   |                |  |
| 76 – 100   | Never                         |                   |                |  |
| > 100  | Never                         |                   |                |  |
| *Frequency performed per shift:      N = Never (0%)      0 = Occasional (1 - 33%)      F = Frequent (34 - 66%)      C = Constant (67 - 100%)   |                               |                   |                |  |

| OBJECT HANDLING  |                                 |          |              |                               |
|--|---------------------------------|----------|--------------|-------------------------------|
| Item   | Weight                          | Distance | Method       | Duration                      |
| Cross arm  | 40-50 lbs.                      | 0-10'    | Lift / Carry | 5-15x/ shift                  |
| Utility stick w/ load break/Chain hoist/Bolt cutters / ratchet cutters | 10 lbs.                         | 0-30'    | Lift / Carry | 5-20x/shift                   |
| Shot-gun stick   | 6 lbs.                          | 0-10'    | Lift / Carry | 5-20x/shift                   |
| Come-a-long w/ slack   | 75lbs.                          | 0-15'    | Lift / Carry | 1-15x/shift                   |
| Chain saw/Hydraulic drill  | 17 lbs.                         | 0-15'    | Push / Pull  | 1-5x/shift                    |
| Grounds  | 3-15 lbs.                       | 0-15'    | Lift / Carry | 5-15x/shift                   |
| Wireshields  | 2 lbs.                          | 0-15'    | Lift / Carry | 5-15x/shift                   |
| Grip   | 2.5 lbs.                        | 0-15'    | Lift / Carry | 5-15x/shift                   |
| Battery operated lug compressor  | 20 lbs.                         | 0-20'    | Lift / Carry | 5-15x/shift                   |
| Tripod Rescue Assembly   | Stand- 451bs,<br>Crank- 25 lbs. | 0-20'    | Lift / Carry | 1-5x/week                     |
| Underground wire rolled up   | 50 lbs.                         | 0-10'    | Push / Pull  | 5-10x/day                     |
| Air Flow Fan   | 25 lbs.                         | 0-20'    | Lift / Carry | 1-5x/week (weather depending) |
|  |                                 |          |              |                               |