EMPLOYEE: CLAIM #



# Job Analysis Form ALTERNATE FORMAT AVAILABLE

JOB TITLE Cable Splicer

JOB CLASSIFICATION Lineman

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 829.361-010

**DOT TITLE** Cable Splicer

**DEPARTMENT** Transportation

**DIVISION** Transit

# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE 11

CONTACT'S NAME & TITLE Mark McKeown, Chief of Power

**CONTACT'S PHONE** 206-263-4604

ADDRESS OF WORKSITE

2255 4<sup>th</sup> Ave. S. Seattle, WA 98134

VRC NAME Kyle Pletz

**DATE COMPLETED 3/22/02** 

VRC NAME Jeff Casem

**DATE REVISED** 5/18/09

#### **WORK HOURS**

Monday through Friday, Tuesday through Saturday, Sunday through Thursday. Day (8:00am-4:30pm), Swing (4:00pm-12:00am), and Graveyard (4:00am-12:00pm) shifts exist with one 30 minute lunch break and two 15 minute breaks.

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion) Optional and varies depending on the season. Optional on most occasions, but can be required in emergency situations.

# JOB DESCRIPTION

Splicing, maintaining and terminating all types of high-voltage power cables used in underground distribution and electrical systems. Inspecting underground vault systems, perform related housekeeping duties and locate cable in underground systems.

May also be required to perform the duties of a Lineman:

Perform journey level work in the construction and maintenance of the trolley overhead and underground systems. Electrical systems (750 volts DC) are energized during construction and maintenance activities. May lead others within the same trade, material workers and helpers, on a temporary basis for specific projects.

#### **ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS**

- 1. Ability to demonstrate predictable, reliable, and timely attendance.
- 2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.

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- 3. Ability to read, write & communicate in English and understand basic math.
- 4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.

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- 5. Ability to work independently or part of a team; ability to interact appropriately with others.
- 6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

#### JOB SPECIFIC REQUIREMENTS

Completion of a line worker apprenticeship and two years of experience as a journey level line worker is required. Demonstrated ability to read, write, and follow verbal instructions is required. Ability to work as a team member. Ability to problem solve. Must possess journey level knowledge and skills in maintaining transit trolley overhead and underground systems. Must have knowledge of electrical theory, principles and techniques as well as safety procedures related to job duties and when working with electrical systems. Must have knowledge of emergency procedures related to job duties (typically this level of knowledge is learned through formal training such as an apprenticeship program and the applicant must clearly demonstrate journey status in the electrical trade). Must have ski9ll in applying techniques and principles of the electrical theory and electricity; installing conduit and pulling underground cables; applying safety procedures, including emergency situations; identifying and locating cable; reading and interpreting blueprint and schematic drawings; using specialized tools associated with cable splicing responsibilities. A Washington State driver's license as well as a Washington State Flagging and traffic Control Certificate.

#### **ESSENTIAL FUNCTIONS**

- 1. Splices, maintains and terminates all types of high-voltage power cables.
- 2. Pulls, racks, and secures high-voltage cables in manholes, conduit, tunnels and vaults.
- 3. Installs, troubleshoots and repairs electrical equipment required for underground distribution systems and traction power systems.
- 4. Locates and repairs or clears trouble in underground systems.
- 5. Bends, installs, maintains and repairs all types of conduit.
- 6. Works with distribution system maps and feeder maps, cuts sheets to perform switching and tagging for power dispatches to de-energize underground conductors.
- 7. Installs, maintains, troubleshoots and repairs protection systems.
- 8. Performs high-voltage, direct current tests on power cables and equipment.
- 9. Inspects work completed by external contractors.
- 10. Pumps water from vaults. Inspects and cleans catch basins.
- 11. Responds to emergency calls for repairs made during non-working hours as necessary.
- 12. May have to perform the work responsibilities as a Utility Line Worker:
  - Sets and guys all types of poles; assembles and fastens cross-arms, brackets, mast arms and related hardware.
  - Strings wires and cables for electrical power distribution systems and transit power circuits or control circuits.
  - Installs and maintains overhead trolley lines; tests, troubleshoots and repairs defective circuits.
  - Splices wires and cables and installs conductors in conduit or overhead wiring.
  - Trims trees in close proximity to overhead lines.

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• Installs, maintains, and repairs intersection tracks, directional, power and induction switches, sectional circuit breakers, crossovers, and other overhead trolley equipment.

- Performs inspection, maintenance and service on the rails and switch gear.
- Performs related work as assigned by the supervisor.

#### PERSONAL PROTECTIVE EQUIPMENT USED

Head protections, safety vest, gloves (high and low voltage), harness, belts, ear protection, eye protection, leather footwear, escape respirator, knee pads, and insulating blankets.

#### OTHER TOOLS & EQUIPMENT USED

Cable, tower truck, hoisting devices, hand tools, wood and steel poles, chain saw, cranes, shovels, digging bars, jackhammer, digger truck, auger, pole puller, spoon and spades, pry bar, ratchets, anvil, hammer, various hand tools, belt and hooks for climbing poles, man lift, ladder, various testers, high pots, sheaves, blocks, torch, pumps, air monitor, locator, flag stands, signs, crimpers, heater, generators, cutters, battery cutters and ratcheting cutters.

### PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED

Continuously = occurs 66-100% of the time
Frequently = occurs 33-66% of the time
Occasionally = occurs 1-33% of the time
Rarely = may occur less than 1% of the time
Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

#### This iob is classified as

Very Heavy—exerting in excess 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.

#### **Standing**

Health Care Provider initials if restricted

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Frequently on concrete/asphalt/wood surfaces for up to 30 minutes at a time for up to 4 hours in a work shift. Most commonly occurs while performing safely watch duties, splicing wires and assembling or wiring switches.

#### Walking

Health Care Provider initials if restricted\_

Occasionally on hard surfaces for distances of 600 feet for up to 5-10 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while performing locating duties and traversing within a vault. The employee also walks when traversing between the work site and work truck as well as when performing inspections.

#### Sitting

Health Care Provider initials if restricted\_

Occasionally on a seat in the truck for up to 30 minutes at a time for up to 2-3 hours total in a work shift. Most commonly occurs while driving to job sites in a truck as well as when reviewing prints.

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# Climbing stairs

Health Care Provider initials if restricted\_

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Occasionally for up to 30 seconds at a time while climbing stairs of one flight for up to 15 minutes total in a work shift. Most commonly occurs while accessing/exiting tower on tower truck as well as when traversing within the shop.

Climbing

Health Care Provider initials if restricted\_

Occasionally on tower truck to heights of 10-12 feet for up to 1 minute at a time for up to 30 minutes total in a work shift. Most commonly occurs while entering/exiting tower of tower truck and accessing ladders. Must also be able to climb out of vaults up to 20 feet deep using a ladder. The employee also climbs poles on an emergency basis.

**Balancing** 

Health Care Provider initials if restricted\_

Occasionally on the underground van and on the tower truck at heights of 10-35 feet for up to 5 minutes at a time on the underground van and up to 4 hours at a time if on a tower truck or man lift for up to 4 hours total in a work shift. Most commonly occurs while working on top of the Underground Van, entering/exiting vaults and using ladders.

# Bending neck up

Health Care Provider initials if restricted\_

Frequently & Highly Repetitive for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while performing overhead work as well as when working in vaults.

## Bending neck down

Health Care Provider initials if restricted

Frequently for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while working on lower areas in vaults.

#### Bending/Stooping

Health Care Provider initials if restricted\_

Occasionally on concrete, asphalt and wood surfaces for up to 15 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while working on low areas in a vault as well as with a partner in a vault.

Kneeling

Health Care Provider initials if restricted

Occasionally on concrete, asphalt and wood surfaces for up to 5-10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while splicing in vaults.

Squatting

Health Care Provider initials if restricted

Occasionally on hard fiberglass surfaces for up to 2 minutes at a time for up to 30 minutes total in a work shift. Most commonly occurs while moving about in tower truck while performing job duties. Worker must also crouch while installing and splicing cable in vaults which may be up to 20 feet deep.

Crawling

Health Care Provider initials if restricted\_

Rare on concrete/asphalt/wood surfaces for distances of 10-20 feet for up to 2 minutes at a time for up to 10 minutes total in a work shift. Most commonly occurs while crawling under equipment while in a tower truck or when working on the deck as well as when working in vaults.

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# **Operating Controls with Feet**

Health Care Provider initials if restricted\_

Occasionally to operate tower truck for 30 seconds at a time for up to 30 minutes total in a work shift while operating the controls on the tower, using the Y-35 hydraulic crimper foot pedal. On a rare to occasional basis the employee may drive for up to 30 minutes at a time for up to 6 hours total in a shift.

# Reaching above shoulder height

Health Care Provider initials if restricted

Occasionally to Frequently & Highly Repetitive for up to 5 minutes at a time for up to 1.5-3 hours total in a work shift while working with tools and equipment above shoulder.

## Reaching at waist to shoulder height

Health Care Provider initials if restricted

Frequently to continuously & Highly Repetitive for up to 5 minutes at a time for up to 1.5-3 hours total in a work shift while handling tools, manipulating cables and splicing cables. On a rare to occasional basis the employee may drive for up to 30 minutes at a time for up to 6 hours total in a shift.

## Reaching at knee to waist height

Health Care Provider initials if restricted

Occasionally & Highly Repetitive for a few seconds to up to 30 minutes at a time for up to 2.5 hours total in a work shift while retrieving tools and materials at lower levels as well as when shoveling and assembling switches.

## Reaching at floor to knee height

Health Care Provider initials if restricted

Occasionally for up to 30 seconds at a time for up to 30 minutes total in a work shift while retrieving tools and materials at lower levels as well as when lifting cables.

#### Lifting 1-10 pounds

Health Care Provider initials if restricted

Continuously & Highly Repetitive of tools for up to 2-3 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 1-8 pounds while using various hand tools and splicing cables. The employee performs splicing approximately one per month which requires lifting 1-10 pounds for up to 2-3 minutes at a time for up to 4 hours total in a work shift. The employee can choose to wear a tool belt which would require lifting for up to 2-3 hours at a time for up to 4-6 hours total in a shift.

#### Carrying 1-10 pounds

Health Care Provider initials if restricted

Occasionally of personal tools for distances of up to 100 feet for 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 8 pounds while carrying personal tools around work site, using locating equipment and painting. The employee can choose to wear a tool belt which would require carrying for up to 2-3 hours at a time for up to 4-6 hours total in a shift.

#### Lifting 11-20 pounds

Health Care Provider initials if restricted

Occasionally of tools and equipment for 1 minute at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 20 pounds while using cable cutters. The employee may also use lifting hoists, and various tools and equipment. The employee can choose to wear a tool belt which would require lifting for up to 2-3 hours at a time for up to 4-6 hours total in a shift.

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# Carrying 11-20 pounds

Health Care Provider initials if restricted\_

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Occasionally of hoists, anvils, cutters, tools and equipment for distances of up to 100 feet for up to 1 minute at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 20 pounds while utilizing tools and equipment back and forth onto tower truck. The employee can choose to wear a tool belt which would require carrying for up to 2-3 hours at a time for up to 4-6 hours total in a shift.

## Lifting 21-50 pounds

Health Care Provider initials if restricted\_

Occasionally to frequently & Highly Repetitive for up to 1 minute at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 23-50 pounds to move trolley hardware up to 50 pounds), and using hoists and cutters (23 pounds) as well as when manipulating tool buckets and cables.

## Carrying 21-50 pounds

Health Care Provider initials if restricted

Occasionally of hoists, tools, anvil for distances of up to 100 feet for 1 minute at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 23-50 pounds while moving trolley hardware (up to 50 pounds), transporting hoists and cutters (23 pounds) as well as when manipulating tool buckets and cables. The employee also carries when hauling tools and materials to and from the truck.

# Lifting 51-100 pounds

Health Care Provider initials if restricted\_

Occasionally for up to 1 minute at a time for up to 15-20 minutes total in a work shift. Most commonly occurs with weights of 60-80 pounds while manipulating trolley hardware as well as when manipulating an edge of vault roller.

#### Carrying 51-100 pounds

Health Care Provider initials if restricted\_

Occasionally for up to 25 feet for 1 minute at a time for up to 15-20 minutes total in a work shift. Most commonly occurs with weights of 60-80 pounds while replacing and installing trolley hardware as well as when manipulating an edge of vault roller.

# **Pushing and Pulling**

Health Care Provider initials if restricted\_

Occasionally of chain hoists with a force of up to 80-100 pounds for up to 2 minutes at a time for up to 30 minutes total in a work shift while cranking the chain hoists to raise tension on wires. Pushing and pulling also occurs while shaping wires, manipulating cables and operating cutters. The worker manipulates cable that is up to 1 inch in diameter weighing 3 pounds per foot. Cable is most commonly pulled into vaults and conduits with power winches. Cable is racked on the walls of the vaults by Employee. Cable has to be shaped and bent using benders. The worker splices wires as well using wrenches and crimpers.

#### Handling

Health Care Provider initials if restricted\_

Frequently & Highly Repetitive while grasping and torquing with anvil and hoists for up to 5-10 minutes at a time for up to 4 hours total in a work shift while pounding out kinks in wire and putting tension on wire, manipulating materials, using a hoist and using various hand tools.

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# Health Care Provider initials if restricted **Operating Controls with Hands** Occasionally for up to 2 minutes at a time for up to 1 hour total in a work shift while operating presses, battery operated cutters and Y-35 crimpers. Health Care Provider initials if restricted Fingering Occasionally while repairing switches of small parts for up to 2 minutes at a time for up to 2 hours total in a work shift while repairing switch mechanisms and building rebar cages as well as when manipulating small tools and equipment. Feeling Health Care Provider initials if restricted\_ Frequently of material and tools for a total of 4 hours in a work shift. Most commonly occurs while feeling for hidden bolts, nuts and equipment as well as when identifying equipment malfunction and utilizing/manipulating small parts. **Talking** Health Care Provider initials if restricted Occasionally for up to 2 minutes at a time with the Foreman on the ground level for up to 1-2 hours total in a work shift while obtaining instructions and plans as well as when communicating with the work partner when working on live lines. Health Care Provider initials if restricted Hearing Continuously for up to 8 hours at a time during work shift while listening to traffic, co-workers, supervisor, and/or pedestrians while performing all job duties. Health Care Provider initials if restricted Seeina Continuously for up to 3-4 hours at a time for up to 8 hours total in a work shift while completing tasks in tower truck, watching for trolley buses and cars, working on live lines, completing safety checks, flagging, viewing traffic signs, viewing color coded equipment, watching for job hazards and watching coworkers for safety purposes. **Working with Heightened Awareness** Health Care Provider initials if restricted\_ Continuously for up to 3-4 hours at a time for up to 8 hours total in a work shift while working on live lines and identifying potential hazards such as moving machinery and electrocution potential. **ENVIRONMENTAL FACTORS** Work is performed outdoors in all types of weather. The work is also performed in close proximity to moving traffic and high voltage wires. Work is performed on energized lines. The noise level is HCP Initials if Restricted Approximately 90 decibels. The noise is caused by trucks and power tools.

Work environment may include the following exposure(s):

Outside weather: Continuously

Non-weather related temperatures below 55 degrees: Occasionally

Non-weather related temperatures above 75 degrees: Occasionally

Wet: Occasionally

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EMPLOYEE:	CLAIM #	
Humidity/dampness: Occasionally		
Fumes: Occasionally to Frequently		
Odors: Occasionally		
Dusts: Occasionally		
Mists: Occasionally		
Gases: Rare		
Moving mechanical parts: Occasion	nally to Frequently	
Vibration: Occasionally		
Working in high, exposed places: C	Continuously	
Toxic or caustic chemicals: Occasion	onally	
Confined spaces: rare		
Other:		

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KING COUNTY JOB ANALYSIS COMPLETED ON: 9/7/05

# POTENTIAL MODIFICATIONS TO JOB

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#### **SIGNATURES**

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Kyle Pletz, VRC, Vocational Consultant			
Printed name & title of VRC evaluator	_		
Signature of VRC evaluator	 Date		
Printed name & title of contact			
Signature of contact	Date		
Printed name & title of employee			
Signature of employee	 Date		

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# HEALTH CARE PROVIDER SECTION Check all that apply

	The employee is released to perform the described duties without restrictions on performance or work hours as of			
	• •	employee is released to perform the described duties on a reduced schedule as of The recommended schedule is:		
	☐ Temporary until	Permanent as of		
	The employee is released to perform the describe	ed job with the following modifications:		
	☐ Temporary until	Permanent as of		
	The employee is not released to perform the desc functions:	cribed duties due to the following job		
	☐ Temporary until	Permanent effective		
	The employee is unable to work in any capacity.  A release to work is:   anticipated by	■ Not expected		
The	limitations are due to the following objective medic	eal findings:		
Delegat	and a vitament representation of the other Care D			
Print	ed or typed name and phone number of Health Care P	rovider		
Sign	ature of Health Care Provider	 Date		