


Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050

## JOB ANALYSIS

Job Title:	Electric Crew Leader	DOT Title:	Maintenance Supervisor
SVP:	7	DOT #:	184.167-050
GOE:	05.02.02	Type of Industry:	Utilities (Light, Heat, and Power)

Analyst: Gina Jaeger Dean, BA, CDMS	JA Source: Town of Steilacoom
Assigned VRC: Gina Jaeger Dean, BA, CDMS	Contact: Paul Loveless
Date: May 28, 2013	Approval:

On-Site    
 Interview    
 Representative

### Essential Functions:


Basic Function: The Crew Leader is responsible for coordinating, scheduling, analyzing, and participating in the maintenance/construction of the electrical system. The person holding this position prepares accurate reports, work orders, other written material as needed, and is accountable for the efficient/effective utilization of personnel/equipment/materials. The Crew Leader has thorough knowledge of the department's purpose/functions/practices. The Crew Leader trains/evaluates assigned employees and works under the direct supervision of the Public Works Director.

Reports to: Public Works Director

Supervises: Electric Crew

Duties and Responsibilities (Essential functions are items 1, 2, 3, 4, 5):

- 1) Supervises, assigns, trains, and participates in the maintenance, installation, and repair of all aspects of the Town's underground and overhead electrical facilities, to include, high voltage primary transformers, low voltage secondary power services, street lighting and metering. Repairs/maintains the Town's water well and lift stations, particularly the electric motors and controls.
- 2) Demonstrate thorough knowledge and proficiency the safe operation of various heavy equipment to include boom trucks, bucket trucks, dump trucks, the Vector truck, and backhoes.
- 3) Plans, schedules work operations and employee assignments, projects, equipment, and material. Monitor and evaluate progress and the completed tasks to ensure all work is done to industry and Town standards.
- 4) Maintains records, reports, evaluations, and work orders. Independently composes correspondence for self and superiors. Assists in the preparation and management of the department's budget.
- 5) Serves as the main point of contact for vendors and suppliers to the Town, including contractors accomplishing work on the electric utility. Establishes requirements for stockage and specific materials, receives materials after order by others. Resolves problems, ensures compliance, responds to concerns, complaints, and inspections.
- 6) Responds to callouts/emergencies.
- 7) Performs functions of the position with/without accommodation.

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
		DOT#:	184.167-050
Involved Body Parts:			

- 8) Maintains compliance with the requirements for vehicle/equipment/tool use to ensure the ability to safely/efficiently complete the necessary tasks of the position.
- 9) Performs other duties as requested to include assisting the water, sewer, streets, storm drain, parks or Public Safety departments.
- 10) Maintains and updates the electric utility Operations, Maintenance, and Management Plan (OMMP) and associated reference materials and documentation, including design standards.
- 11) Establish and ensure compliance with appropriate safety programs and training directly applicable to Linemen and Electricians.
- 12) Position may require work to be performed on high voltage energized lines.
- 13) Assists the Public Works Director in the review, planning, and executing of special projects, capital improvement projects, and private development projects to include inspections.
- 14) Maintains compliance with Washington Administrative Code pertaining to supervision of line workers.

The duties listed above are illustrations of the types of work that may be performed in the position. Omission of specific statements of duties does not provide an exclusion if the work performed is similar, related, or a logical assignment to the position. The job description may be subject to change by the employer as the needs of the employer and/or requirements of the job change.


### Job Qualifications and Skills:

#### Minimum Qualifications:

- 1) High school diploma or GED including or supplemented by courses in electrical theory and application.
- 2) Six years experience in the construction/maintenance/repair of overhead/underground electrical distribution systems or completion of an approved apprenticeship program with two additional years experience.
- 3) Possession of a valid Journey Line Worker's Card with additional Labor and Industries qualifications to assist external crews in lock-outs and tag-outs to allow contractors and other crews to be able to repair Town equipment.
- 4) One year supervisory and planning experience in related fields and one year college level course work, or two years of demonstrated supervisory and planning experience in related fields.
- 5) Must be able to comply with all requirements as outlined in Washington Administrative Codes (WAC) that pertain to this position including, but not limited to, WAC Chapter 296-45.
- 6) Possession of, or ability to obtain, a valid Washington State Driver's License Combination Class: B with tanker endorsement and be subject to random drug and alcohol testing.
- 7) Possess a good driving record.
- 8) Possession of or ability to obtain Washington Industrial First Aid Certification, Cardio-Pulmonary Resuscitation Certification, and a Washington State Flagging Card.
- 9) Pass a background check with no convictions for crimes against *at risk* populations.

#### Knowledge, Abilities, and Skills:

- 1) Extensive knowledge of methods/practices/tools, and material required for repair/maintenance/construction projects of the department.
- 2) Thorough knowledge of safety regulations and standards applying to the work crews and the public.
- 3) Ability to analyze and manage emergency situations exercising sound judgment in stressful situations.

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050

- 4) Ability to read, comprehend, and interpret civil construction plans, specifications, and decipher scale.
- 5) Ability to identify and resolve problems.
- 6) Ability to supervise and effectively communicate verbally and in writing with management, employees, and the public.
- 7) Ability to comprehend and execute written and oral instructions.
- 8) Ability to maintain harmonious work relationships.
- 9) Ability to supervise and participate in all aspects of the needs of the department.
- 10) Willingness to obtain additional training as required by the department.
- 11) Ability and willingness to respond to emergency calls during other than regular hours in any and all working conditions.
- 12) Computer skills to include Word and Excel. Operates printers, copiers, faxes, and related office equipment. Willingness to learn and apply new technologies such as Geographic Information Systems (GIS) and Global Positioning Systems (GPS).

**Machines, Tools, Special Equipment, Personal Protective Equipment Used:**


Hot sticks (fiberglass sticks), fiberglass ladders of various sizes, transformer boxes, Capstan wire puller, various sizes of pipes and conduits, three gauges of wire, fused pipe elbows, Vactor truck (water knife and vacuum), jack hammer (60 lbs.), shovels, back hoe, cold patch material, flashlight, hand tools (screw driver, wrench, hammer, etc.), bucket truck, dump truck, concrete cutting saw, locater, fault wizard, rake, digging bar, vault key, volt meter/amp meter, reciprocating saw, AED, climbing equipment, whacker/plate whacker or thumper, pipe bender, torch, phasing sticks, transformer tester, secondary conductor tracer, rotation meter, splicing equipment, jacket stripper, cable stripper, hydraulic crimping tool, scale/ruler, cable cutter, CAT5 splicing equipment CAT5 tester, chainsaw, hedger, hedge cutter, hand saw, gloves, hard hat, safety glasses, steel-toed boots, fire resistant clothing, safety vest, and two-way radio.

**PHYSICAL REQUIREMENTS**

Frequency Scale	Strength	Work Pattern	
<b>N</b> = Never	<input type="checkbox"/> Sedentary	<input checked="" type="checkbox"/> Full-time	
<b>S</b> = Seldom (1-10 %, up to 48 min)	<input type="checkbox"/> Light	<input type="checkbox"/> Part-time	
<b>O</b> = Occasional (11-33%, 48 min. – 2 hr 25 min)	<input type="checkbox"/> Medium	<input type="checkbox"/> Seasonal	
<b>F</b> = Frequent (34-66%, 2 hr 26 min – 5 hr 35 min)	<input checked="" type="checkbox"/> Heavy	8	Hours Per Day
<b>C</b> = Constant (67-100%, more than 5 hr 35 min)	<input type="checkbox"/> Very Heavy	5	Days Per Week


The position may require over-time, especially during inclement weather conditions. The percentages listed in the time and frequency columns represent an estimate of maximum amount of time a worker would spend performing these physical demands. Work assignments vary from day to day, and the crew leader may be called out to perform the work of a serviceperson due to absences, or job requirements

PHYSICAL DEMANDS	Time	FREQUENCY					ACTIVITY DESCRIPTION
		N	S	O	F	C	
Sitting	Up to 80%				X		Operating computer to check and send e-mail, review parts inventory and check orders. Sitting is also performed when operating motor vehicle, dump truck, driving Vactor truck, and when operating back hoe, participating in staff and safety meetings, schedules work and ensures equipment is available, map reading, and plan review.

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050


Standing	Up to 50%				X		Mapping and review of plan sets, working within vaults, checking motor controls at substation, operating meters/equipment, and working within bucket trucks (flagging).
Walking	Up to 50%				X		Performed when supervising crews, gathering and maneuvering equipment into place, locating wires, installing and/or repairing street lights, accessing motor control, pulling wire, applying cold patch, and accessing various areas of the office, equipment yard, and jobsite inspection.

	N	S	O	F	C	
<b>Lifting</b> floor – waist	N/A	Up to 60 lbs.	5 to 50 lbs.	Up to 15 lbs.	Up to 5 lbs.	Items lifted include vault lids (30-50 lbs), transformer box (10-20 lbs.), concrete boxes (up to 50 lbs.), jackhammer (60 lbs.), fiberglass ladders (10 to 30 lbs.), hand tools (5 to 15 lbs.), shovels, wire, conduit, digging equipment (5 to 20 lbs. depending upon weight of materials such as dirt, cold patch, etc.), Capstan (this item was not weighed; however it is typically wheeled into place, and only the arms are lifted and placed into position - approximately 10-15 lbs.), and plate whacker (this piece of equipment is maneuvered back and forth onto a lift gate, so the full weight of the item is never lifted; however, at least part of the equipment is lifted to allow the gate lip to slide underneath the plate).
<b>Lifting</b> waist–shoulder	N/A	Up to 60 lbs.	5 to 50 lbs.	Up to 15 lbs.	Up to 5 lbs.	Items lifted include ladders of varying sizes and weights, jackhammer (60 lbs.), shovels (up to 20 lbs. when loaded with material), multiple phase wire cables of varying sizes and weights, testing equipment, hand tools (5-15 lbs.), lamp heads (20 lbs.), two-way radio (nominal weight), plans (nominal weights), flashlight (up to 5 lbs.), transformer box (10-20 lbs.), secondary power pedestal (weight unknown), hot sticks (approximately 5 to 10 lbs.), fused elbows (10 to 15 lbs.), fault wizard (30-40 lbs.), Vactor truck hose for water knife and vacuum (up to 10 lbs.) brush cutters (10 to 15 lbs.), and light poles (100 lbs. shared by two or more people).
<b>Lifting</b> above shoulder	N/A	Up to 50 lbs.	5 to 50 lbs.	Up to 15 lbs.	Up to 5 lbs.	Overhead electrical lights can weigh approximately 100 lbs., and are lifted (brought down) by two or more individuals. The use of an overhead crane (jib) is employed to hoist the poles into place. The heads, which weigh up to 20 lbs. are typically replaced using a lift bucket. Hand tools (5 to 15 lbs.) are used to replace lighting heads.
<b>Carry</b>	N	S	O	F	C	Any of the items listed above may also be carried,

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050

(Dist.)	N/A	Up to 60 lbs.	5 to 50 lbs.	Up to 15 lbs.	Up to 5 lbs.	with the exception of the plate whacker. This piece of equipment is typically dragged across the ground to the truck lift gate, where it is lifted mechanically, and maneuvered onto the work truck.
Pushing/ Pulling Force	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>	Performed when maneuvering Capstan (wire puller), plate whacker, vault lids, shovel, elbow plug-in/pull-out, wire and conduit installation, and meter pulling.
	N/A	Up to 50 lbs.	Up to 20 lbs.	N/A	N/A	


	<b>N</b>	<b>S</b>	<b>O</b>	<b>F</b>	<b>C</b>	
Climbing		X				Climbing ladders (both above and below ground), and utility poles are required. The latter is performed once per year to demonstrate pole rescue, and may be performed in an emergency.
Balancing		X				Performed while working in bucket, and when climbing ladders and poles, entering/exiting work site equipment, stooping, raising from a kneeling position, and when walking, especially over uneven ground.
Stooping / Bending			X			Performed when troubleshooting in order to isolate faulty wire, wire splicing, and conduit installation – fault wizard and wand are utilized to locate existing wires. This activity is performed approximately three to four times per week. This function may also be performed when working in confined spaces. May involve bending below ground level, and also may be performed when working in office to access areas below waist.
Twisting			X			Performed when driving to check for traffic conditions, operating the backhoe, installing light poles, working in bucket, shoveling, opening/closing vault lids, opening transformer boxes and pedestals, pulling wire.
Squatting / Kneeling			X			Performed when troubleshooting in order to isolate faulty wire – fault wizard and wand are utilized to locate existing wires. This activity is performed approximately three to four times per week. This function may also be performed when working in confined spaces, and splicing.
Crawling		X				Required when entering small spaces. This is performed on a very seldom basis as most access areas are supplied by ladders, and are not confined enough to require crawling. Climbing in and out of areas underground level would be a more appropriate term/physical action to describe this function.
Foot Controls			X			Performed when operating motor vehicle, Vector truck, backhoe, and other motorized equipment.

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
		DOT#:	184.167-050
Involved Body Parts:			

The frequencies are documented in terms of maximum amount of time the functions would be performed. Workloads vary each day depending upon the activities, and the number of available crew members. There may be days where these functions are performed less frequently.

	N	S	O	F	C	
<b>Reaching</b> (Level)	Forward			X		Working with plans, operating motor vehicles, climbing ladders, working with hand tools, sticks, wire, and other hand-held equipment all require reaching forward.
	Below Waist		X			Performed when picking up tools and materials from ground level, locating underground wires, working with transformers, pedestals, and vaults, digging, reviewing plans (from a standing position), and splicing.
	Above Shoulder	X				Climbing ladders, working on utility poles from bucket, operating hedging equipment, working with wire cables of differing length and weights, and when splicing.
Handle/Grasp					X	Items manipulated include plans, scale, computer mouse, telephone, two-way radio, steering wheel, hand tools, metering equipment, wire cables, vault lids, ladders, motorized equipment, shovel, hot sticks, fused elbows, transformer boxes, pedestals, electrical lights, flashlight, keys, wire-cutting equipment, entering/exiting vehicles and equipment.
Fine Finger Manipulation			X			Performed when keyboarding, and utilizing computerized equipment. This function may also be required when working with small parts, utilizing keys, wire, motor control functions, writing reports, and evaluations.
Hand Controls			X			Items maneuvered include metering equipment, Vactor truck, motor vehicles, two-way radios, installing motor control equipment, and operating a backhoe.
Repetitive Motion		X				Shoveling, tightening bolts, and keyboarding are examples of repetitive motion tasks. Walking is also performed on a repetitive basis, and is often performed on uneven ground.
Vibratory Tasks		X				Operation of the jack hammer, Vactor truck, and backhoe.

	N	S	O	F	C	
Talking					X	Communicating with contractors, and the general public via telephone and in person, communicating with co-workers.
Hearing					X	Communicating with contractors, and the general

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050

						public via telephone and in person, communicating with co-workers.
Vision					X	Near/far acuity are required in order to operate motorized vehicles, heavy equipment, testing equipment, and to work near/within a high voltage system, working with motor controls/wiring circuits, computers, reading/writing reports/evaluations, and reading schematic drawings/blueprints/plans.


ENVIRONMENTAL CONDITIONS	FREQUENCY						ENVIRONMENTAL CONDITIONS	FREQUENCY				
	N	S	O	F	C			N	S	O	F	C
Exposure to Weather				X			Noise Intensity			X		
Extreme Cold			X				Atmospheric Conditions		X			
Extreme Hot			X				Exposed Heights			X		
Wet and / or Humidity			X				Exposure to Electricity				X	
Proximity to Moving Mechanical Parts		X					Exposure to Toxic / Caustic Chemicals		X			
Exposure to Explosives		X					Exposure to Radiation	X				

**Other:** Requires exposure to hazardous conditions: i.e. working in traffic, working at night, entry to confined spaces and deep excavations, excavations in the close proximity to high voltage electric, gas, and other utilities. There is frequent exposure to loud noises, extreme heat, and cold. Requires exposure to the elements 75 percent of the time. Requires exposure to hazardous materials: i.e. blood borne pathogens, paints, solvents, asphalt, chlorine (in gas, dry, and liquid forms), and contact with live sewer.

**Analyst's Comments:**

**Possible Employer Modifications:**

**Note:** The information for this job analysis was gathered by either on-site observation, interview and/or is representative of the labor market as indicated on page one. Additional data may have been obtained from

Employer: Town of Steilacoom		Worker:	
Vocational Firm: Address:	Precisionary, Inc. P.O. Box 6 East Olympia, WA 98540-0006	Claim #:	
Phone:	(360) 515-5962	Job Title:	Electric Crew Leader
Involved Body Parts:		DOT#:	184.167-050

standardized industry resources such as the DOT, GOE, COJ, OOH, WOIS and O-NET. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective, quantifiable data. For this reason, a "best estimate" may have been used.

**Analyst:**

*Gina Jaeger Dean, BA, CDMS*

*7/29/2013*

**Presenting VRC:**

*Gina Jaeger Dean, BA, CDMS*

*7/29/2013*

---

Vocational Consultant

---

Date

---

Vocational Consultant

---

Date