



Department:	Electric
Supervisor:	Utility Director
Prior Revision Date:	1.5.2023
Last Revision Date:	8.14.2023
Revision Made By:	KH
Revision Reviewed & Approved by:	DKT, KH
Employment Status:	IBEW
Date Provided to Bargaining Unit	8.14.2023

Job Description

ELECTRICIAN/OPERATOR

Definition

Maintains, installs, and repairs all departmental electrical equipment. Also, when needed, operates and monitors hydro and diesel generation.

Supervision Received

Works under the direction of the Utility Director.

Supervision Exercised

None.

Duties *(The duties listed in this section are intended as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.)*

Electrician:

Performs maintenance, troubleshooting and repair of power plant electrical systems. Power plant systems include: electric motors, pumps, relays, heaters, sensors, control systems, protective relays, programmable logic controllers, transfer switches, backup battery arrays, and the Supervisory Control and Data Acquisition System (SCADA) for remote control.

Wires and installs current (CT) and potential (PT) transformers including test switches for metering commercial accounts. Tests and inspects CT's and PT's at existing locations to ensure code required accuracy.

Tests, calibrates, and repairs kilowatt hour electric meters in the Petersburg community to ensure Code required accuracy; programs digital electric meters as needed; and verifies in-use digital meters are programmed correctly. These duties are regularly performed in this position.

Training in these duties will be provided.

Reads large commercial electric meters monthly and records results using handheld electronic meter reader.

Performs daily line order work. This work typically involves reading meters for new or terminated accounts, including connection and disconnection of electric meters. This work also includes power quality testing and troubleshooting of metering equipment and services.

Plans for new equipment and changes in existing electrical equipment.

Compiles monthly reports totaling kilowatt fuel usage, lube oil usage, kilowatt hours (kWh) generated by Crystal Lake hydro, (kWh) generated by power plant diesel generators, (kWh) delivered by the Tyee hydroelectric facility, and PMPL (kWh) usage.

Develop, implement, and maintain a program to identify and reduce system (kWh) losses.

Inspects residential housing to ensure compliance with the National Electric Code.

May inspect commercial/industrial electrical installations in cooperation with agencies that have regulatory authority and jurisdiction over such facilities.

Reads electric and water meters as needed.

Assists other Borough departments with electrical issues when needed and appropriate.

Operator: (*Training in these duties will be provided and are requirements of the position.*)

Assumes responsibilities of Power Plant Operator as required.

Offers technical guidance to fellow employees regarding electrical operations.

Provides for safety of generation operation by observing meters, gauges and related devices and taking appropriate action.

Monitors Power Plant generators to maintain continual distribution of power.

Requires selection of most efficient engine to operate, spot checking for problems, measuring temperatures regularly, and cleaning/oiling when necessary.

Notifies mechanic when repairs are required.

Assists mechanic with repairs to generators or hydro facility as needed.

Performs daily power plant checklist for opening and closing down the power plant facility.

Performs bi-weekly hydro facility checklists at Blind Slough power plant.

Travels by vehicle, helicopter, plane and/or foot to Crystal Lake Hydro facility for maintenance of mechanical and electrical systems as needed.

Once an experienced operator, incumbent may perform training for new operators.

Other:

Performs other duties as assigned.

Distinguishing Characteristics

The work assigned to positions in the Electrician/Operator classification is distinguished from work assigned to other positions in the department by the element of maintenance and repair of electrical equipment.

Working Conditions

Incumbent performs approximately 50% of duties in plant shop environment risking possibility of physical injury through electrical shock. Employee is exposed to a variety of weather conditions while calibrating and repairing electric meters. Lifting normally does not exceed 50 lbs. While working as operator, up to 90% of duties are performed in seated position in noisy environment. Employee may be exposed to physical hazards while working around large diesel engines and electrical generators. Operators must be available for call-out and shift work.

Qualifications *(Continuation of employment is contingent upon employee maintaining the qualifications listed below.)*

Ability to establish and maintain effective working relationships with fellow employees and the public; work cooperatively with supervisor; and display willingness to assist co-workers.

Must be able to obtain an Alaska State Driver’s License.

Must obtain a State of Alaska Journeyman Electrician Certificate of Fitness as a precondition of employment or receive reciprocity/Alaskan certification from another state’s Journeyman program within 6 months of hire. The Alaska certificate must be in hand to be retained beyond the 6-month probationary period. ***(The Petersburg Borough will assist in obtaining this certificate.)***

Any combination of experience and education which provides the applicant with the following attributes:

- Skill/experience in operation of hydro and diesel generators.
- Skill/experience in revenue metering applications.
- Skill in operating a variety of hand and power tools used in electrical utility work.
- Ability to understand, diagnose, and repair electrical systems. Requires basic understanding of typical electrical utility operation with emphasis on specific technical electrical knowledge.
- Ability to perform manual labor under occasional hazardous and uncomfortable working conditions.
- Ability to comprehend technical instructions and interpret plan of action.
- Physical ability to perform the work of the class.
- Knowledge of diesel and hydro generating equipment.
- Ability to work with a minimum of supervision.

Signatures affixed on this job description confirm that it has been reviewed by the employee and his/her direct supervisor and that a clear understanding of the expectations of this position exists.

Employee	Date	Supervisor	Date
----------	------	------------	------