

City and Borough Sitka, Alaska

Class Specification

Class Title	Relay/Control Technician
Class Code Number	4130
FLSA Designation	Non-Exempt
Pay Grade and Range	IBEW
Effective Date	September 2010

General Statement of Duties

Performs electrical maintenance, inspection and repair of power generation equipment; performs related work as required.

Distinguishing Features of the Class

The principal function of an employee in this class is to perform electrical preventive maintenance and repairs on hydroelectric and diesel generation facilities, substations, switchyards, SCADA systems and industrial controls. This class is distinguished from the class of Generation Facilities Mechanic by the performance of electrical maintenance duties. The work is performed under the direct supervision of the Electric Generation System Manager but considerable leeway is granted for the exercise of independent judgment and initiative. An employee in this class performs the duties of other employees in the Electric Department as required or as assigned by supervisory personnel. The nature of the work performed requires that an employee in this class establish and maintain effective working relationships with other Department and City employees, contractors and the public. The principal duties of this class are performed in power generation facilities and in an outdoor environment which may involve adverse weather conditions and related hazards in which the employee is subject to potential personal danger.

Examples of Essential Work (Illustrative Only)

- Installs, maintains, inspects and repairs all power and control circuitry associated with hydroelectric and diesel generation facilities, substations, switch yards, SCADA systems and industrial controls;
- Troubleshoots, analyses and makes recommendations for electrical problems associated with outages;
- Performs preventive maintenance on generators, switch yards, substations, relays, controls and storage batteries;
- Performs special maintenance and modification projects as requested;
- Maintains and updates electrical blueprints and maintenance manuals;
- Maintains and upgrades the SCADA systems;
- Participates in switching procedures during power outages and emergencies;
- Responds to 24 hour standby call outs and "on-call" duty;

- Provides needed information and demonstrations concerning how to perform certain work tasks to new employees in the same or similar class of positions;
- Keeps immediate supervisor and designated others fully and accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems;
- Attends meetings, conferences, workshops and training sessions and reviews publications and audio-visual materials to become and remain current on the principles, practices and new developments in assigned work areas;
- Responds to citizens' questions and comments in a courteous and timely manner;
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities;
- Performs other related duties as assigned.

Required Knowledge, Skills and Abilities

- Thorough knowledge of the principles, practices, methods, equipment and tools used in the electrical maintenance of power generation, switch yard, substation, SCADA and industrial control equipment;
- Thorough knowledge of occupational hazards and safety precautions for electrical inspection, maintenance and repair;
- Thorough knowledge of electrical theory;
- Thorough knowledge of the overall electrical system and its operations;
- Thorough knowledge of the switching procedures to restore power;
- Good knowledge of computer spread sheet and word processing, database applications currently in use in the department;
- Skill in the maintenance, repair and operation of electrical and mechanical equipment;
- Skill in the use of hand tools and heavy equipment;
- Skill in working on energized and de-energized electrical lines;
- Ability to read and interpret blueprints and electrical maintenance manuals;
- Ability to perform duties in all weather conditions;
- Ability to insure the safety of co-workers and the general public;
- Ability to respond to on call, standby and other emergency conditions;
- Ability to accurately read and record system data;
- Ability to communicate well with others, both orally and in writing, using both technical and non-technical language;
- Ability to understand and follow oral and/or written policies, procedures and instructions;
- Ability to prepare and present accurate and reliable reports containing findings and recommendations;
- Ability to use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions;
- Ability to perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines;
- Ability and willingness to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;
- Integrity, ingenuity and inventiveness in the performance of assigned tasks.

Acceptable Experience and Training

- Graduation from high school or possession of a GED, preferably supplemented by graduation from a certified electrical trade school including course work in advanced code & safety, troubleshooting, motor controls, PLC's, protective relays and SCADA systems; and
- Considerable experience in electrical inspection, maintenance and repair of hydro and diesel generation systems, troubleshooting and SCADA; or

- Any equivalent combination of experience, education and training which provides the knowledge, skills and abilities necessary to perform the work.

Required Special Qualifications
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- Possession of a driver's license issued by the State of Alaska.
- Possession of an Alaska State Certificate of Fitness as a Journeyman Electrician.
- Possession of First Aid and C.P.R. Certification.

Essential Physical Abilities

- Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, which permits the employee to communicate well with other employees and the general public;
 - Sufficient vision or other powers of observation, with or without reasonable accommodation, which permits the employee to see small parts and numeric designations;
 - Sufficient manual dexterity with or without reasonable accommodation, which permits the employee to work with hand tools and wire;
 - Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, which permits the employee to access a diversity of work space
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