

Chugach Electric Association, Inc.
Anchorage, Alaska

Electronics Technician II

This position performs predictive, preventive, and corrective maintenance and operates SCADA/communications equipment in communications, distribution, transmission and generation station facilities. Individuals in this position will install, commission, maintain, and evaluate for maintenance all types of communication systems and auxiliary equipment.

Education

- Two (2) year technical college degree related to electronic maintenance or successful completion of a military communications electronics-training program.
- Three (3) years experience in communications systems installation and maintenance.
- Successfully completed Trigonometry, Algebra and demonstrated proficiency in advance math skills.
- Individuals with four (4) year electrical engineering degree (BSEE) and two years of communications systems engineering experience will be considered.

Other

- Must have FCC General Radio Telephone Radio's license.
- Must have valid Alaska driver license.
- Must have a basic understanding of electronic system operation and maintenance.
- Must be able to utilize, troubleshoot and read electronic test/diagnostic equipment.
- Must be able to read color-coded components and cables.
- Must be willing and capable of climbing and working at heights of 200 feet.

This position is subject to the terms and conditions of the Generation Plant Personnel Agreement between Chugach Electric Association, Inc., and the I.B.E.W., Local 1547.

Individuals will be required to fill out an additional Electronic Technician II Evaluation Questionnaire.

An application is available to download at www.chugachelectric.com. Submit your application and resume in confidence to:

Chugach Electric Association, Inc.
Human Resources Department
5601 Electron Drive
Anchorage, AK 99518
Fax: (907) 562-8703
Email: recruitment@chugachelectric.com

Anyone needing assistance with the application process should contact the Human Resource Department at (907) 762-4428.

An Equal Opportunity Employer For All

CHUGACH ELECTRIC ASSOCIATION, INC.
Anchorage, Alaska

Position Description
Electronic Technician II

Objectives

- I. A. To perform predictive, preventive, and corrective maintenance, and operation of SCADA/ communications equipment in communications, distribution, transmission and generation station facilities. This position will focus on predictive, preventative, and corrective maintenance, as well as, installation and operation of communications equipment.
- B. As a member of a skilled technical team, including other communications, substation and generation technical personnel, individuals in this position will install, commission, maintain, and evaluate for maintenance all types of communication systems and auxiliary equipment.

II. Reporting Relationship

- A. Reports to Manager Control & Communications Systems or designee.

III. Duties

A. Common with Substation Technicians, and Relay Technicians

- 1. Maintains competency in testing and maintenance techniques, including safety practices, by attending training seminars and schools and by pro-actively exercising this knowledge on the job. Studies and understands equipment and training manuals. Will participate in annual evaluations of job performance and skills. **These evaluations may be written, oral, or demonstrative and will be consistent with the Agreement Covering Terms and Conditions of Employment Generation Plant Personnel between Chugach Electric Association Inc. and IBEW 1547 (the Agreements)**
- 2. Observes safe practices in performance of daily work.
- 3. As required, assists in design/testing/construction of new equipment installations and completes as-built drawings and material orders for assigned projects.
- 4. Analyzes detailed prints such as AC/DC diagrams, connect and interconnect, and diagrams of circuits prior to starting projects. Informs appropriate personnel of work to be performed and issues requiring resolution within and outside the department before starting work.
- 5. Prepares, forwards and updates, as required, station drawings, records of inventory data, installation and commissioning test results, as-builts and other

relevant data as construction, maintenance, and commissioning work is completed.

6. Performs other duties related to this classification as assigned.

B. Electronic Technicians

1. Performs installation, testing, troubleshooting, calibration and maintenance of all types of communication systems. These systems include, but are not limited to;
 - Digital microwave to include the multiplex, channel equipment, as well as the antennas and wave-guide
 - Data, Voice, SCADA, and Radio circuits.
 - Digital telephone equipment including electronic switch equipment, through the intervening transmission systems, to the instrument
 - Teleconferencing
 - Paging
 - Trunked and single channel mobile radio
 - Multiple address radio
 - Transfer trip
 - Power line carrier
 - Fiber optic transmission systems
 - Digital carrier (T-1) systems
 - LAN cable and LAN cabling hubs
 - Power amplifier and audio systems
 - Audio! video recording & playback equipment
 - Communication enunciators
 - Interactive voice response (IVR) and voice mail systems
 - Electronic security systems
 - Workstations, routers, and other peripheral equipment associated with the SCADA master station and the Remote Terminal Unit (RTUs) located in substations, power plants and microwave sites.
 - Un-interruptible Power Systems (UPS)
 - DC battery and charger systems including DC-to-DC converters, and inverters
2. Use complex electronic measuring and testing devices to operate, install, trouble shoot and repair any of the equipment in section B.1 such as:
 - Two way radio service monitors -to check transmitters, receivers and modulation of radios
 - Various models of data test sets -to check and trouble shoot data equipment and circuits
 - Various models of volt! ohm/amp meters -to measure voltage resistance and current.

- Various models of data protocol analyzers -to check if data is being transmitted or received correctly with or without errors.
 - Various models of microwave power meters -to trouble shoot or make sure microwave transmitters are working properly
 - Various models of frequency counters -to measure frequency of various types of frequency generators.
 - Various models of transmission test sets -to test, install and trouble shoot circuits.
 - Various models of oscilloscopes -to look at various signals
 - Video monitors -to install and check video circuits
 - Various models of optical time domain reflectometers -for installing, trouble shooting, and repairing fiber optic cable.
 - Various models of fusion splicers -for splicing fiber optic cables
 - Various models of optical power meters -for testing fiber optic cables
 - Various Diagnostic Software
3. Uses computers to test, configure and maintain communications! SCADA equipment.
 4. Installs and maintains Wide Area Network (WAN) equipment including hubs, switches, routers, term servers, and other IP devices in support of SCADA and telecommunications networks at generation plants, substations, and communications sites exclusive of the work performed by the SCADA/EMS Systems **Engineer**, Systems Analyst -SCADA/EMS and the Relay Department already being performed.
 5. As required, provides technical advice to other technicians and employees on proper operation of communications equipment and related items.
 6. Work Conditions: work will be performed in the field in varying weather conditions. Flights in fixed-wing aircraft and helicopters will be required. Work will include working with helicopters slinging communications equipment to remote sites. Occasional exposure to cold temperatures for extended periods of time may be necessary.

IV. Relationships

1. Manager Control & Communications Systems or designee -reports to, receives work assignments from, discusses problems encountered in the work with, submits tests reports to, coordinates work assignments with.
2. Other Chugach Electric Personnel -Coordinates work assignments and

maintenance activities with as assigned by the Manager Control & Communications Systems

3. Chugach Dispatch -Coordinates work with when working with critical systems or outage required work.

V. Job Qualifications

A. Education and Employment

Minimum qualifications include a High School diploma, two year technical college degree related to electronic maintenance or successful completion of a military communications electronics-training program at consisting of not less than 30 Weeks of full time instruction, and three years experience in communications system installation and maintenance. Must have successfully completed Trigonometry, Algebra and have demonstrated proficiency in advanced math skills. In addition individuals with a four-year electrical engineering degree (B.S.E.E.) and two years of communications system engineering experience will be considered.

By majority vote, the Bid Committee may allow a candidate to be considered that would not otherwise meet the requirement for a two-year technical college degree related to Electronic Maintenance. In these cases experience directly related to communication design, construction, maintenance or testing would be substituted for this degree. In the event that the majority vote has been taken and the applicants experience is to be considered, the bid committee will develop and administer a written examination to determine if the applicant's knowledge and expertise is sufficient to substitute for these requirements. The Bid Committee may also require oral and demonstrative evaluation of the applicant's knowledge, skills and judgment. In the event that the applicant successfully passes the examination and interview process, the applicant will be considered along with all other applicants.

B. Experience

Experience should include from the following, electronic theory, circuit operation, test equipment application and connections, wiring techniques and color code, installation, calibration, or maintenance of systems listed in III.B. 1 above.

C. Abilities and Skills

Must have a basic understanding of electronic system operation, and maintenance. Must be able to utilize electronic test/diagnostic equipment, trouble

shoot electronic equipment and read; AC and DC control, wiring, and schematic drawings. Must be willing to study equipment and test manuals. Must have knowledge of basic electronic circuits and controls. Must have knowledge of basic personal computer operation, including Windows and Excel. Must have the mechanical and physical aptitude to fabricate, construct and install equipment as needed for projects. Must be able to read color-coded components and cables. Must be able to lift 60 lbs to waist height. **Will be willing and capable of climbing and working at heights of 200 feet.**

D. Other Requirements Valid Alaska Driver License

Must have FCC General Radio Telephone Radio's license or obtain it before the end of probation period if hired past 11/01/02.

Must maintain a residence, by the end of the probationary period, which permits a Sixty (60) minute report time to the Chugach Dispatch Center.


Must be willing to spend approximately twenty percent (20%) of working time out of town

May be called out for department needs outside of normal work hours.

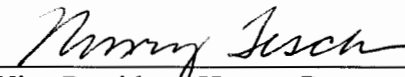
The person in this position will be required to carry a company provided communication pager and/or cellular phone, while on duty or on standby.

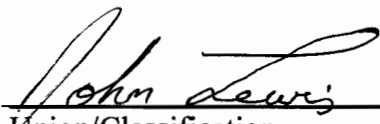
VI. Qualifications Verification

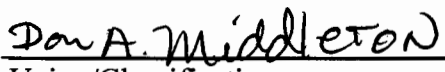
All applicants may be required to pass a written/oral/demonstrative examination to identify skill levels.

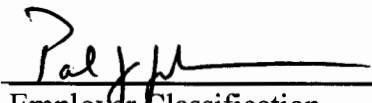
Approved by: 
Director, System Control

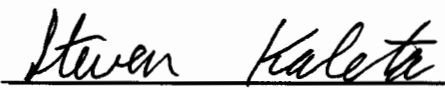
Date: 10/11/06

Reviewed by: 
Vice President, Human Resources

Approved:  10/02/06
Union/Classification
Committee Member


Union/Classification
Committee Member


Employer Classification
Committee Member


Employer Classification
Committee Member