

**ARCTEC Alaska****Power Generation Specialist****ASSIGNED LOCATION: PHQ****DEPARTMENT: Facilities****PURPOSE OF POSITION:**

Under the general supervision of the Operations Manager and Facilities Lead, perform operations, maintenance, repair of power generation and facilities systems, vehicles, equipment, and overhaul of the prime power and emergency standby power plants and other facilities systems at ARCTEC Alaska's Long Range Radar Sites (LRRS) remote sites in support of the Alaska Radar System (ARS) Project.

**PRIMARY RESPONSIBILITIES:**

1. Perform troubleshooting, minor/major repairs, RWP's and preventive maintenance inspections on power generation equipment, power plant sub systems and fire suppression engines IAW manufactures manuals.
2. Perform both minor/major overhauls on Cummins K and N series engines also Onan and Caterpillar as required.
3. Apply knowledge of electrical theory and basic troubleshooting techniques for AC/DC circuits to repair power generation equipment to function as intended.
4. Troubleshoot and repair equipment associated with power generation equipment including breakers, voltage regulators, engine governors, and protective relays.
5. Perform calibration of Power Generation equipment as required to ensure optimum load response and reliability.
6. Measure and document wear on components during Preventative Maintenance Inspections (PMI) using micrometers and other precision measuring equipment.
7. Diagnose problems and implement corrective actions using information from oil sample test reports.
8. Collect performance data IAW manufacturer's manuals to indicate the need for overhauls of all prime power and emergency generators. Also auxiliary diesel units such as fire pumps and portable generators.
9. Scrutinize RWP services and modify as necessary to ensure optimum service intervals according to performance data, oil sample results and trending.
10. Produce all computer-based reports necessary to track Preventive Maintenance Inspections (PMI's) and Power Generation Systems (PGS) unit status at all sites.
11. Produce all reports necessary to meet Contract Data Requirements List (CDRL) requirements.
12. Forecast 45K overhaul and 15K services a year in advance to order parts with money from the previous fiscal year.
13. Ensure that all tools and parts needed to complete job duties are organized, inventoried, and maintained, and that shipping requirements are met.

14. Plan and coordinate work activities with ARS personnel, sites, departments and third-party requirements as necessary.
15. Must have the ability to obtain and maintain a SECRET security clearance.
16. Bring to the attention of the Operations Manager or Facilities Lead incidents or circumstances which could affect the performance of the ARS Project.
17. Be familiar with ARCTEC Alaska Operating Instruction, Administrative Instructions, Task Orders, Personnel Policies and Procedures, and the system, procedures, and equipment applicable to the job responsibilities.
18. Perform all other tasks as required by the mission.

**SECONDARY RESPONSIBILITIES:**

1. Perform administrative duties and maintain assigned workplace, materials, and equipment in a safe, secure, and neat condition.
2. Organize, requisition and follow up to ensure there is sufficient tooling and materials on hand to support the operation and maintenance of power generation systems, applies understanding of shipping requirements associated with power generation related materials to ensure that parts and equipment arrive at sites when needed.
3. Work with logistics to help facilitate the betterment of the site stock system
4. Assist on-site station mechanics when required, but not to conflict with Power Generation primary responsibilities.

**CORE QUALIFICATIONS:**

1. Minimum 5 years' experience with power generation and engine component overhauls and at least 3 years' experience in the operation and maintenance of facilities systems including but not limited: fire systems, alarm systems, plumbing systems, electrical distribution systems, sewage systems, and heating ventilation systems.
2. Successful completion of a recognized course or apprenticeship in power generation, millwright, or heavy equipment operations or industrial mechanics.
3. Demonstrated experience operating and maintaining electrical power generation plants up to 1000 kW including basic electrical repairs to conductors, motor controllers, electrical relays, alternators, and diesel engines.
4. Demonstrated ability to troubleshoot problems and diagnose prime movers, electrical switchgear and electrical power generators and to successfully repair identified problems.
5. Must be familiar with and knowledgeable about relay logic control, PLC logic control, basic programmable software and code writing, wiring diagrams and ladder logic, basic blueprints, and understand DC voltage systems up to 125volts.
6. Must be able to effectively train personnel on power generation systems, electrical distribution operation and emergency power plant procedures including black start and split buss configurations.
7. Must have working knowledge of the operation and maintenance of equipment utilized in the fuel transfer operation, including pumps, piping, valves, tanks, and level monitoring equipment.

8. Working knowledge of computers and applications to include word processing (MS Word), Spreadsheets (MS Excel), Mail (MS Mail, Outlook) and the ability to maintain multiple engine data in spreadsheet and database formats.
9. Strong problem-solving and interpersonal skills to interact with co-workers and customer representative.
10. Strong organizational skills and ability to work independently.
11. Have a valid Driver's license and acceptable driving record.
12. Speak, read, and write in English proficiently enough to complete all employment duties.
13. Be a US citizen, or US national, and have the ability to obtain and maintain a SECRET security clearance.
14. Current bi-annual CPR and First Aid Certification with AED.
15. Ability to travel individually or in a group to remote sites throughout Alaska as required and assigned. Must be able to travel in small aircraft and must be prepared to remain overnight in small villages in substandard accommodations.

#### **SECONDARY QUALIFICATIONS:**

- Familiar with wind turbine and diesel power systems integration and operation
- Must be able to perform bulk transfer of petroleum-based products including; diesel fuel, gasoline, and various lubes and oil.

#### **PHYSICAL REQUIREMENTS:**

The following physical activities are frequently required of a Power Generation Specialist: balancing; bending; kneeling; squatting; reaching; sitting; standing; walking; climbing steep stairs; pushing; pulling; lifting heavy objects; grasping; communication in person, by phone or through written correspondence; hearing; and seeing. Incumbents may be subjected to moving mechanical parts, vibrations, dust, repetitive motions, and working outdoors in inclement weather. Successful candidate must be able to lift a minimum of 75 pounds. Certain duties may require repetitive motions. The noise level in the operating environment may require personal protective equipment, particularly hearing protection.

#### **REPRESENTATION OF POSITION**

This position is covered under the Collective Bargaining Agreement (CBA) between the International Union of Operating Engineers (IUOE) Local 302 and ARCTEC Alaska J/V as it relates to wages, benefits hours and working conditions.

**ARCTEC Alaska is an EO and AA employer and complies with Title I of the ADA.**