

Job Description

Position:	Power Systems Maintenance Technician	FLSA Status:	Non-Exempt
Department:	LFG	FTE:	Full Time
Reports to:	Power Systems Supervisor	Revised:	December 2023

DEFINITION:

Under supervision of the Power Systems Supervisor, plan, organize, operate, and maintain the District's Electric Power Generation Facility; to perform skilled mechanical work in the maintenance and repair of LFG/methane/natural gas fueled power generation systems; and to perform other job-related duties as required.

DISTINGUISHING CHARACTERISTICS:

This is an experienced, journey level, specialist class for the operation, maintenance, and repair of District LFG/methane/natural gas fueled power and generation systems. Duties include on-going operations, as well as performing specialized, skilled mechanical and electrical maintenance and repair work as directed. Incumbent is expected to work unusual shifts, weekends, evenings, holidays, and 24-hour on call status when required. Incumbents must have their own hand tools.

ESSENTIAL FUNCTIONS:

The following duties are typical of this classification and are intended only to describe the various types of work that may be performed, the level of technical complexity of the assignment(s) and are not intended to be an all-inclusive list of duties. The omission of a specific duty statement does not exclude it from the position if the work is consistent with the concept of the classification or is similar or closely related to another duty statement to address business needs and changing business practices.

- Assists the Power Systems Supervisor with planning, organizing, and performing tasks at the Electric Power Generation Facility of the District.
- Helps evaluate the overall daily operating efficiency of the Facility.
- As directed, research, and ensures the proper compliance of electrical systems and the landfill gas building.
- Prepares and maintains reports about Facility operations.
- Monitors compliance with air pollution regulations and standards.
- Assists with inventory of parts and supplies.
- Prepares materials estimates for maintenance and repair projects.
- Regularly inspects power generation and distribution systems for safe operations and required maintenance and repairs.
- Locates problems, assists in diagnosing mechanical and/or electrical defects on equipment, and carries out necessary repairs under supervision.
- Trouble shoots electrical control and switchgear problems under supervision.
- May overhaul large bore internal combustion engines.
- Inspects and maintains auxiliary equipment.
- Performs required maintenance and operation functions on LFG field wells and associated equipment.
- Performs housekeeping duties and general plant maintenance.
- Works with established preventive maintenance programs.
- May respond to citizen complaints and inquiries.
- Makes field and emergency repairs as necessary; shares 24-hour "on-call" duties with other staff.



MINIMUM QUALIFICATIONS AND RESPONSIBILITIES:

Knowledge of and Ability to:

- Principles, methods, materials, equipment, procedures, and practices used in operation, maintenance, and repair of an LFG/methane/natural gas fueled electrical generation facility.
- Fundamentals of electricity, both AC and DC.
- Operation, care, and maintenance of gasoline and diesel engines and components.
- Environmental requirements for operation of power generation facilities on a landfill site.
- Principles and methods of preventive maintenance.
- Maintenance of wells, pumps, and collection systems.
- Use of electrical and electronic testing equipment.
- Basic computer and programmable logic controllers
- Safe work practices and procedures.
- Maintain day-to-day responsibility for the operation, maintenance, and repair of LFG/methane/natural gas fueled electrical generation facility.
- Perform specialized, skilled work in the inspection, location, diagnosis, and correction of operating problems, mechanical problems, and electrical problems at an electrical generation plant and associated facilities.
- Ensure safe and optimum electrical generation facility operations.
- Analyze the layout, instrumentation requirements, and functions of an electrical generation/transmission facility.
- Carry out preventive maintenance programs.
- Prepare and maintain a variety of reports.
- Understand and follow oral/written instructions and accept constructive criticism.
- Work independently and apply sound judgment and critical thinking skills in a variety of circumstances to make effective decisions.
- Provide advice and consultation on electrical generation facility operations, maintenance, and repair.
- Effectively respond to citizen concerns and information requests.
- Establish and maintain cooperative working relationships.
- Adhere to an assigned work schedule including the availability to be on-call 24 hours/7 days a week as assigned by supervisor.
- Pass District post-offer physical examination, which includes drug testing and assessment of safe work capacity in relation to the essential job functions of the position.

TRAINING, EDUCATION AND EXPERIENCE:

Any combination of training and experience which would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

College Technical Certificate or similar trade training. Four (4) years of increasingly responsible journey level work experience in the operation, maintenance, and repair of Engine Systems, particularly a methane gas fueled facility. Basic engine/diesel fundamentals. Basic electrical fundamentals. Completion of advanced educational training in methane fueled generators and electrical power transmission systems is highly desirable.



Special Requirements:

Possession of a current California Driver's License issued by the State Department of Motor Vehicles. Continued possession of a valid California Driver's license and compliance with established District vehicle operation standards, including on-going insurability to drive District vehicles, are conditions of employment.

PHYSICAL AND SENSORY REQUIREMENTS:

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

Frequently stand and walk; sit for extended periods; some walking on uneven and slippery surfaces; frequent climbing and some kneeling, stooping, and crouching; corrected hearing and vision to normal range; verbal communication; use of mechanical and electrical maintenance and repair equipment.

Mental Demands

While performing the duties of this class, employees are regularly required to: work well under pressure; communicate effectively in both written and verbal form; read and interpret data, information and documents; learn and apply new information or skills; perform detailed work on multiple, concurrent tasks with constant interruptions; work under deadlines and interact with all levels of District management and personnel, and the public.

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Normally work is performed in both indoor and outdoor environments; regular exposure to dust; some exposure to fumes, grease, and oil; exposure to electrical current and energy; exposure to landfill gasses; exposure to the landfill surface and well systems; exposure to loud and constant noise, requiring the use of hearing protection at all times, while working in engine room, regular contact with other staff and occasional contact with public.

ACKNOWLEDGEMENT

I verify that I have received a copy of the job de	scription and I understand the requirements of this position
Employee Name (Print)	Date
Employee Signature	