NEVADA IRRIGATION DISTRICT			
Job Description			
Job Title:	Hydroelectric Maintenance Technician I/II	Reports To:	Hydroelectric Maintenance Supervisor
Salary Range:	B38 / B62	Approved by Board of Directors:	07/25/2018
FLSA Status:	Non-Exempt	Unit:	<u>Field</u>

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class.

Specifications are <u>not</u> intended to reflect all duties performed within the job.

## **Definition**

To perform a variety of semi-skilled mechanical duties related to the operation of the District's hydroelectric generation facilities, dams, reservoirs, flumes and related facilities; to operate light to heavy construction and maintenance equipment in support of activities related to the construction, maintenance and repair of hydroelectric facilities; and to ensure work is performed in a safe manner. Employees at this level only receive occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies within the work unit.

# **Distinguishing Characteristics**

Hydroelectric Maintenance Technician I: This is the entry level class in the Hydroelectric Maintenance Technician series. Positions in this class typically have little or no directly related work experience. The Hydroelectric Maintenance Technician I class is distinguished from the II level by the performance of less than the full range of duties assigned to the II level. Incumbents work under immediate supervision while learning job tasks, progressing to general supervision as procedures and processes of assigned area of responsibility are learned.

<u>Hydroelectric Maintenance Technician II:</u> This is the journey level class in the Hydroelectric Water Systems Operator series and is distinguished from the I level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the I level.

### **Supervision Received and Exercised**

Hydroelectric Maintenance Technician I

Receives immediate supervision from assigned supervisor.

# Hydroelectric Maintenance Technician II

Receives general supervision from the assigned supervisor.

May exercise technical and functional direction over assigned personnel.

## **Essential Functions Statements**

Essential and other important responsibilities and duties may include, but are not limited to, the following:

1. Follow procedures and ability to safely work in electrical substations while wearing appropriate arc rated clothing and personal protective equipment (PPE).

- 2. Operate light to heavy construction equipment in support of the construction, installation, maintenance and repair of District hydroelectric facilities, including but not limited to, reservoirs, powerhouses, flumes, dams, bridges and roads.
- 3. Perform complex grading, excavation, and installation using motor graders, loaders, backhoes, dump trucks, bulldozers, excavators, and related equipment.
- 4. Safely operate equipment over snow such as snowmobiles and snow cats. Helicopter flights may be required for inspection and completing tasks as required.
- 5. Perform preventative and corrective maintenance on all types of equipment associated with District hydroelectric plants, canals and overhead flumes, including mobile and heavy equipment.
- 6. Form and pour concrete for the construction and repair of foundations, flumes, dams, and canals; perform complex carpentry repairs to overhead wooden flumes and related facilities.
- 7. Assist in the repair and maintenance of powerhouses; independently perform routine maintenance duties as related.
- 8. Perform complex rigging duties for all types of repairs and installations, ensuring safe and proper use of equipment.
- 9. Perform skilled welding, cutting, brazing and soldering techniques using shielded metal arc welding (SMAW), gas tungsten arc welding (GTAW), gas metal arc welding (GMAW), and oxy acetylene welding for repairs to facilities and construction related equipment.
- 10. Ability to read, understand and work from a variety of blueprints and drawings.
- 11. Clean trash racks and remove fallen trees and other debris from canals, lakes and roads. Remove vegetation, clear trees and maintain District right of ways for facilities.
- 12. Perform carpentry, welding, plumbing and other maintenance duties in support of hydroelectric facilities.
- 13. May perform as a lead worker over another employee or small crew of temporary employees.
- 14. Identify equipment needs for assigned work; check equipment for safe handling and use, and deliver to and return equipment from work sites, ensuring compliance with transit requirements.
- 15. Estimate time, materials, equipment and needs required for assigned tasks.
- 16. Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.
- 17. Perform related duties as assigned.

## Qualifications

## Hydroelectric Maintenance Technician I

## Knowledge of:

- Operational characterizes of power-driven construction equipment.
- Methods and techniques used in evaluating site conditions for safe and effective equipment operation.

- Construction practices, tools and materials used in the repair and maintenance of hydroelectric powerhouses including concrete work, welding, carpentry, and plumbing.
- Safe use of a variety of hand tools, power tools, and welding equipment.
- Pertinent Federal, State and local laws, codes and regulations.
- Basic record keeping procedures.
- Modern office equipment including use of applicable computer applications.

# Ability to:

- Operate and use light to heavy construction equipment in support of activities related to the construction, maintenance and repair of District hydroelectric facilities.
- Ability to work from heights while wearing fall protection and appropriate personal protective equipment.
- Perform a variety of semi-skilled construction and maintenance tasks associated with all hydroelectric facilities.
- Perform inspection and repairs on construction equipment and tools.
- Perform heavy manual labor for extended periods.
- Perform skilled carpentry, welding, and plumbing duties.
- Operate and use modern office equipment including a computer and applicable software.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Communicate clearly and concisely, both orally and in writing.

### Responsibility to:

- Obey safe work practices, procedures, and regulations including wearing personal protective equipment and safety devices.
- Operate equipment in a careful and safe manner.
- Acknowledge the use of safeguards by other employees.
- Report any removal, displacement, damage, destruction, or tampering of safety devices, safeguards, notices or warnings.
- Report any safety risks or hazards to your supervisor or other management personnel.
- Report to your supervisor or other management personnel any work assignment that you feel would require you to perform the work in an unsafe manner.

# Hydroelectric Maintenance Technician II

In addition to the qualifications for the Hydroelectric Maintenance Technician I:

#### Knowledge of:

 Advanced construction practices, tools and materials used in the repair and maintenance of hydroelectric powerhouses including concrete work, welding, carpentry, and plumbing.

### Ability to:

• Independently perform a variety of skilled construction and maintenance tasks associated with all hydroelectric facilities.

### **Experience and Education Guidelines**

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

## Experience:

<u>Hydroelectric Maintenance Technician I:</u> Two years of progressively responsible experience in the operation and maintenance of distribution facilities and hydroelectric plant facilities involving the operation of light to heavy construction and maintenance equipment.

<u>Hydroelectric Maintenance Technician II:</u> Two years of progressively responsible experience in the operation and maintenance of distribution facilities and hydroelectric plant facilities involving the operation of light to heavy construction and maintenance equipment or two years of responsible experience similar to Hydroelectric Technician I with the Nevada Irrigation District.

## **Education:**

Equivalent to completion of the twelfth grade supplemented with industrial or construction maintenance coursework, apprenticeship or certification.

#### License and Certificate:

## Hydroelectric Maintenance Technician I:

Possession and maintenance of a valid Class A driver's license is required.

Possession of certification as a Certified Crane Operator within one year of appointment.

Possession of certification as a forklift operator within one year of appointment.

# **Hydroelectric Maintenance Technician II:**

Possession and maintenance of a valid Class A driver's license is required.

Possession of certification as a Certified Crane Operator.

Possession of certification as a forklift operator.

## **Working Conditions**

## **Environmental Conditions:**

Work is performed in an outdoor environment on a year-round basis subject to outdoor weather conditions including extreme heat and cold and to wet, humid conditions, fumes and/or airborne particles. Duties may be performed near moving mechanical parts and on slippery and uneven surfaces with exposure to toxic or caustic chemicals and risk of electric shock.

#### **Physical Conditions:**

Essential functions may require maintaining physical condition necessary to sit while driving a piece of equipment; stand and walk while performing maintenance activities; bend and twist to adjust equipment; kneel and squat to review work; climb ladders or climb up on to heavy equipment to begin operations; perform simple and power grasping, pushing, pulling, and fine manipulation; and lift or carry weight of 75 pounds or less; push, pull or torque up to 150 pounds.

#### Mental Conditions:

Essential functions may require maintaining mental condition necessary to know and understand operations and maintenance activities and observe safety rules; intermittently, analyze problem equipment; identify safety hazards; locate equipment; interpret work orders; remember how to operate equipment; explain job to other employees; handle conflict.