

APPROVED BY: THE CHIEF OPERATING OFFICER

**EFFECTIVE: May 2019** 

#### SYSTEMS CONTROL OPERATOR I/II/III

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

#### **DEFINITION**

To be responsible for duties in support of the District's raw water systems; to monitor and operate local and imported raw water transmission facilities, pumping plants and hydro-electric plants to control the flow of water during an assigned shift; to operate, control, and perform minor maintenance at large water pumping or hydro-electric plants; and to perform a variety of tasks relative to assigned area of responsibility.

## **DISTINGUISHING CHARACTERISTICS**

### **Systems Control Operator I**

This is the entry level class in the Systems Control Operator series. Employees have only limited or no directly related work experience. This class is distinguished from the Systems Control Operator II by performing the more routine tasks and duties assigned to positions within the series under immediate supervision while learning to perform the full range of responsibilities as assigned. Advancement to the "II" level is based on demonstrated proficiency in performing the assigned functions, and is at management's discretion.

# **Systems Control Operator II**

This is the journey level class within the Systems Control Operator series. Employees within this class are distinguished from the Systems Control Operator I by the performance of the full range of duties as assigned with only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the "I" level, or when filled from the outside, have prior experience. Advancement to the "III" level is based on demonstrated proficiency in performing the assigned functions.

## **Systems Control Operator III**

This is the advanced journey and/or lead level class in the Systems Control Operator series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed and the complexity of duties assigned. Employees have lead responsibilities and perform the most difficult and responsible types of duties assigned to classes within this series. Employees at this level are required to be fully trained in all procedures related to assigned area of responsibility. Advancement to this level is at management's discretion and is dependent on demonstrated ability to perform advanced planning and execution of shutdowns and source changes, and preparing, editing and maintaining standard operating procedures

### SUPERVISION RECEIVED AND EXERCISED

#### Systems Control Operator I

Receives immediate supervision. Employees within this class work in the presence of their supervisor or in a situation of close control and easy reference. Work assignments are given with explicit instructions or are so routine that few, if any, deviations from established practices are made without checking with the supervisor.

### **Systems Control Operator II**

Receives general supervision. The assigned duties for employees within this class require the exercise of judgment or choice among possible actions, sometimes without clear precedents and with concern for the consequences of the action. Employees may or may not work in proximity to their supervisor.

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#### **TYPICAL DUTIES**

The duties specified below are representative of the nature and level of duties assigned to this class and are not intended to be an inclusive list. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this position. Management reserves the right to add, modify, change, or rescind the work assignments of different positions.

- 1. Maintain and operate automated controls to ensure that commitments and daily schedules set by regulations, customer demands, and standard practices are met.
- 2. Remotely control the flow of water through turnouts to maximize the recharge of water, and hydro-electric facilities to maximize electric production while maintaining adequate system flow.
- 3. Validate unusual readings by contacting field personnel for verification; notify supervisory or maintenance personnel of unusual conditions.
- 4. Confer with plant operators, other internal staff, and personnel from other utilities regarding system operation; explain system operating procedures to visitors.
- 5. Observe and inspect pumps, motors, generators, and related equipment for safe and proper operation; coordinate high voltage and general switching orders in dealing with Western Agricultural Processors Association (WAPA) and Pacific Gas and Electricity (PG & E).
- 6. Monitor stream flow stations to prevent dry back conditions that result in violations of state and federal fish and wildlife ordinances.
- 7. Issue internal and external switching and clearance orders; bypass portions of the system during emergencies or planned maintenance shutdowns; insure lockout procedures are completed before maintenance activities commence.
- 8. Perform confined space entry functions in the completion of assigned tasks; ensure adherence to established safety procedures and precautions.
- 9. Maintain detailed logs and records of work performed; prepare clear and concise reports as requested.
- 10. Interact with the District's Emergency Operations Center (EOC), field operations personnel, and County communications personnel to resolve emergency flood control situations during periods of heavy rain.
- 11. Work on-call during the weekends and nights on a rotating basis.
- 12. Communicate with external customers such as California Department of Water Resources, San Benito County, and treatment plants about operations such as shut downs; coordinate with customers to ensure they receive deliveries; communicate, plan, and orchestrate system.
- 13. Use pressure monitoring devices to find leaks in pipelines.
- 14. Employees have a responsibility for safety; for following safety regulations and safety policies and procedures applicable to their work.

- 15. Pursuant to California Government Code Section 3100, all public employees are required to serve as disaster service workers subject to such disaster service activities as may be assigned to them by their supervisors or by law.
- 16. Perform related duties and responsibilities as required.

#### **QUALIFICATIONS**

The level and scope of the knowledge, skills and abilities listed in this section are related to the job duties as defined under Distinguishing Characteristics.

## Systems Control Operator I

Some Knowledge of:

Operations, services, and activities of a water distribution program.

Operational principles of power generation, transmission, and distribution equipment including pipelines, pumps, valves, motors, and generators.

Principles, practices, methods, and maintenance requirements involved in the operation of water transmission, distribution, and storage facilities and equipment.

Operational principles and maintenance requirements of hydro-electric production and pumping facilities and equipment.

Occupational hazards and standard safety practices.

Principles of business writing and report preparation.

Ability to:

Learn to operate a computer-based system to monitor and control water conveyance and distribution.

Learn to monitor and control, locally and remotely, pumping plant and/or hydro-electric plant operations.

Perform calculations.

Learn to recognize unusual operating conditions and take appropriate action.

Learn principles and practices of hydrology and hydraulics.

Learn to perform confined space entry functions in the completion of assigned tasks.

Maintain detailed records and prepare clear and concise reports.

Work irregular work hours including weekends, evenings, and holidays.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Training and Experience Guidelines

The following combination represents the minimum training and experience requirements for this classification:

Training

Equivalent to the completion of the twelfth grade.

Experience

One (1) year of experience in local and remote monitoring, operations, and control of multiple water storage and distribution systems and facilities.

License or Certificate

Possession of, or ability to obtain, an appropriate, valid California driver's license.

## **Systems Control Operator II**

In addition to the qualifications for Systems Control Operator I:

Some Knowledge of:

Principles and practices of hydrology and hydraulics.

Working Knowledge of:

Operations, services, and activities of a water supply, flood control, and environmental stewardship systems.

Principles, practices, methods, and maintenance requirements involved in the operation of water transmission, distribution, and storage facilities and equipment.

Operational principles and maintenance requirements of hydro-electric production and pumping facilities and equipment.

Operational principles of power generation, transmission, and distribution equipment including pipelines, pumps, valves, motors, and generators.

District and regulatory agency policies and procedures governing the control and release of water including California Department of Fish and Wildlife, Bureau of Reclamations, Western Agricultural Processors Association, National Oceanic and Atmospheric Administration Fisheries, Parks and Recreations, Department of Water Resources, Department of Safety of Dams, Federal Energy Regulatory Commission.

Ability to:

Operate a computer-based system to monitor and control water conveyance and distribution.

Monitor and control, locally and remotely, pumping plant and/or hydro-electric plant operations.

Recognize unusual operating conditions and take appropriate action.

Perform confined space entry functions in the completion of assigned tasks.

Training and Experience Guidelines

The following combination represents the minimum training and experience requirements for this classification:

**Training** 

Equivalent to the completion of the twelfth grade.

Experience

Three (3) years of experience in local and remote monitoring, operations and control of multiple water storage and distribution systems and facilities.

License or Certificate

Possession of, or ability to obtain, an appropriate, valid California driver's license.

## Systems Control Operator III

In addition to the qualifications for Systems Control Operator II:

Thorough Knowledge of:

Operational characteristics of remote system control devices.

Principles, practices, methods, and maintenance requirements involved in the operation of water transmission, distribution, and storage facilities and equipment.

Operational principles and maintenance requirements of hydro-electric production and pumping facilities and equipment.

Operational principles of power generation, transmission, and distribution equipment including pipelines, pumps, valves, motors, and generators.

Principles and practices of hydrology and hydraulics.

Ability to:

Operate a computer-based system to monitor and control water conveyance and distribution.

Monitor, analyze, and control, locally and remotely, pumping plant and/or hydro-electric plant operations.

Recognize unusual operating conditions and take appropriate action.

Work independently in the absence of supervision.

Write SOPs.

Training and Experience Guidelines

The following combination represents the minimum training and experience requirements for this classification:

**Training** 

Equivalent to the completion of the twelfth grade.

Experience

Five (5) years of experience in local and remote monitoring, operations and control of multiple water storage and distribution systems and facilities.

License or Certificate

Possession of, or ability to obtain, an appropriate, valid California driver's license.

#### **WORKING CONDITIONS**

#### **Environmental Conditions**

Office and field environment; some positions require frequent field visits or occasional field assignments; travel from site to site; work closely with others or alone; exposure to electrical and radiant energy; irregular work hours including overtime and possible rotating shifts; some positions may involve exposure to inclement weather; heat, cold, dampness, chilling and dry atmospheric conditions; uneven terrain; slippery surfaces; work in confined spaces; work at elevated heights, work with machinery; work around moving vehicles and around high traffic; exposure to biohazards; dirt, dust, fumes, vapors, smoke, gases, noise, poison oak, chemicals, biological and chemical contaminants, wildlife, and other conditions associated with construction sites, water treatment plants and urban and remote field conditions.

### **Physical Conditions**

Essential and other important functions may require maintaining physical condition necessary for walking, standing or sitting for extended periods of time; audiovisual acuity; manual dexterity; heavy to very heavy lifting; operating motorized equipment and vehicles, walking on uneven surfaces including hard terrains, uneven slopes, and inclined surfaces; stooping, pushing, pulling, squatting, crawling, twisting, kneeling, climbing, and bending at neck and waist; simple grasping; fine manipulation; power grasping; work above and below shoulder and in awkward positions.

# **CLASS LEGEND**

Established Date: 5/2018
Employee Groups: EA
Revisions Dates: 5/2019
FLSA Status: Non-exempt

<u>Current</u> <u>Previous</u>

Class Code: FD2/5/6 Series Code: 1FD

Family Code: Previous Titles:

Analyst: FD