

## I. DESCRIPTION OF WORK

Positions in this banded class perform semi-skilled and skilled utilities maintenance and repair work on energy utility systems. Positions perform a wide range of progressively responsible tasks involving the service, inspection, troubleshoot, repair, rebuild and diagnosis of a diverse number of mechanical, electrical and I&C systems for cogeneration (boilers, turbines, coal handling), chilled water and electric distribution systems and equipment. Work ranges from inspection, service, repair and troubleshooting to analyzing highly complex control, electrical and mechanical systems and equipment using advanced diagnostic instruments and software; conducting parts/systems failure analysis; to include calibrating, tuning, and operating said system and equipment. Standard operational guidelines, system safety procedures, vendor manuals and manufacturer publications and bulletins are normally established and employees apply technical knowledge and skills, occasionally modifying standard practice and procedures due to unusual situations. Positions must routinely determine materials, techniques and tools to accomplish work assignments. Work assignments vary in complexity depending on the type of control, electrical and mechanical systems components and equipment. Assignments are normally received in the form of written or verbal work orders, which usually indicate the general nature of the task or describe the nature of the problem. New or unusual assignments may be accompanied by more detailed instructions. Work is performed under general supervision and may be reviewed and inspected in progress or upon completion.

## II. ROLE DESCRIPTIONS BY COMPETENCY LEVEL

Contributing	Journey	Advanced
<p>Positions at this level operate or perform semi-skilled and skilled work on control, electrical and mechanical systems and equipment. Positions perform a variety of recurring and related tasks using steps and processes that are readily understood and that are associated with complex systems and components. Example: Inspect equipment for lubrication, cooling water, vibration, noise and overheating. Positions operate and observe operation of boilers, chiller and high voltage equipment and systems.</p>	<p>Positions at this level perform a variety of recurring and non-recurring work that involves related or varying processes and that are associated with moderately complex systems. Positions analyze and determine various courses of action. Examples: Install and maintain high/low voltage electric distribution systems; identify, investigate and analyze causes; determine solutions for equipment installation; perform repair and maintenance on boilers, chilled water, etc. Positions monitor and operate moderately complex boiler, chiller and electrical distribution systems and remotely via a computerized system.</p>	<p>Positions at this level perform a number of widely varying and diverse assignments that require in-depth analysis and diagnostic work. They serve as a “technical expert” within the work unit and guides and coaches others. Positions demonstrate a thorough and extensive understanding of the most difficult and complex equipment and systems. Examples: Plan and implement modifications to piping for steam, chilled water and voltage wiring installation for electric distribution. Positions serve as lead operator making decisions and providing direction in abnormal operating situations.</p>

**III. COMPETENCIES**

Competency	Definition
<b>Knowledge - Technical</b>	Technical/operational skills and knowledge in a specific technical area(s) and ability to keep up with current developments and trends in areas of expertise. May be acquired through academic, apprenticeship or on-the-job training or a combination of these.
<b>Safety and Health Compliance</b>	Ability to understand applicable policies and procedures, and maintain conditions that ensure a healthy and safe working environment.
<b>Problem Solving</b>	Ability to identify problems, determine possible solutions, and actively work to resolve the issues.
<b>Customer Service</b>	Ability to develop and maintain strong relationships with clients (those who buy goods and services and for whom formal professional services are rendered) or customers (those who consume goods and services) by listening to the client/customer and understanding and responding to identified needs.

Note: Not all competencies apply to every position/employee; evaluate only those that apply. Competency statements are progressive.

**IV. COMPETENCY STATEMENTS BY LEVEL**

**Knowledge – Technical**

Technical/operational skills and knowledge in a specific technical area(s) and ability to keep up with current developments and trends in areas of expertise. May be acquired through academic, apprenticeship or on-the-job training or a combination of these.

Contributing	Journey	Advanced
<p>Ability to perform a variety of recurring and related tasks using steps and processes that are readily understood and are associated with less complex components, equipment and systems. Examples: Inspect equipment for lubrication, cooling water, vibration, noise, overheating and overall operational status of boilers, chillers and high voltage equipment for electric distribution, cogeneration and chilled water systems.</p> <p>Ability to troubleshoot, calibrate, maintain and repair less complex components, equipment and systems.</p>	<p>Ability to understand both standard and non-standard work processes.</p> <p>Ability to perform a variety of recurring and non-recurring work that involves related or varying processes and that are associated with moderately complex components, equipment and systems.</p> <p>Ability to troubleshoot, analyze and determine various courses of action for moderately complex components, equipment and systems. Examples: Installation and maintenance of high/low voltage electric distribution systems or high energy pumps and motors.</p> <p>Ability to identify and troubleshoot to determine solutions for equipment installation, repair, maintenance and operation of boilers, turbines and chillers and electrical distribution systems.</p> <p>Ability to operate moderately complex equipment and systems using computer controls.</p>	<p>Ability to perform a number of widely varying and diverse assignments that require in-depth analysis and diagnostic work.</p> <p>Ability to serve as a “technical expert” within the work unit and guides and coaches others.</p> <p>Ability to demonstrate a thorough and extensive understanding of complex equipment and systems. Examples: Plan and implement modifications to piping for steam, chilled water and high voltage wiring installation for cogeneration, chilled water and electric distribution systems.</p> <p>Ability to make operational decisions and provide direction in the operations of complex equipment and boiler systems.</p>

**Safety and Health Compliance**

Ability to understand applicable policies and procedures, and maintain conditions that ensure a healthy and safe working environment.

Contributing	Journey	Advanced
<p>Ability to perform tasks safely to avoid danger to self or co-workers; ability to identify and inform supervisor of potential system safety problems; ability to use appropriate protective equipment in a safe manner.</p>	<p>Ability to identify and resolve potential system safety problems and unsafe work practices; ability to show co-workers safe ways to perform job tasks or use equipment; ability to incorporate accident prevention and corrective measures in all activities; ability to regularly assess shop safety conditions.</p>	<p>Ability to demonstrate commitment to provide safe working environment by leading by example; ability to follow appropriate post-emergency procedures.</p> <p>Ability to lead facility safety efforts and regularly communicate safety-related operational items.</p>

**Problem Solving**

Ability to identify problems, determine possible solutions, and actively work to resolve the issues.

Contributing	Journey	Advanced
<p>Ability to follow instructions or standard operating procedures for assigned tasks; ability to ask for clarification of instructions as needed; ability to perform routine or repetitious tasks completely and accurately; ability to check work for mistakes prior to review; ability to compare finished work to what is expected.</p> <p>Ability to provide field operational solutions.</p>	<p>Ability to ensure non-routine, non-repetitious work meets industry service standards according to service manuals; ability to check and rechecks work prior to and after completion; ability to seek approval of supervisor or higher-level technician upon completion of assignment; ability to use appropriate record-keeping methods.</p> <p>Ability to operate and identify operation issues of moderately complex equipment and systems.</p>	<p>Ability to independently take necessary actions to ensure that industry service standards and procedures are followed when handling multiple, complex assignments.</p> <p>Ability to read and interpret Original Equipment Manufacturer (OEM) manuals and uses diagnostic tools.</p> <p>Ability to lead and resolve operations issues associates with complex equipment and systems.</p>

**Customer Service**

Ability to develop and maintain strong relationships with clients (those who buy goods and services and for whom formal professional services are rendered) or customers (those who consume goods and services) by listening to the client/customer and understanding and responding to identified needs.

<b>Contributing</b>	<b>Journey</b>	<b>Advanced</b>
Ability to respond to customer needs within established parameters; ability to provide prompt, attentive service; ability to listen carefully and check for understanding of customer needs; ability to demonstrate courteous actions and follow the organization's established protocol for customer service.	Ability to anticipate, identify and understand customer's service needs; ability to effectively balance multiple priorities; ability to check with customers to ensure repair or solution meets needs; ability to develop positive relationships with internal/external customers (i.e. vendors, distributors, other technicians).	Ability to identify trends that impact service delivery to groups or individual customers; ability to make recommendations to improve service delivery based on customer feedback; ability to look for ways to remove barriers to optimize service delivery.

**V. MINIMUM TRAINING & EXPERIENCE**

High school diploma or equivalency and one year of related experience; or equivalent combination of training and experience. Requires certification(s).

Note: This is a generalized representation of positions in this class and is not intended to identify essential work functions per ADA. Examples of competencies are primarily those of the majority of positions in this class, but may not be applicable to all positions.