ELECTRICAL AND INSTRUMENTATION MECHANIC II

Code No: 4-14-220 COMPETITIVE

DISTINGUISHING FEATURES OF THE CLASS: This is a semi skilled mechanical position in the electrical and instrumentation group of the Monroe County Water Authority's Production Department Maintenance section responsible for installing, maintaining and repairing electrical and instrumentation equipment utilized in the treatment plant and offsite locations. This position differs from Electrical and Instrumentation Mechanic III in that it calibrates, repairs, and inspects instrumentation equipment, voltage power distribution and variable frequency drives as well as orders parts and supplies. The employee reports directly to, and works under the general supervision of a higher-level staff member. Employees are required to ascend heights and enter confined or restricted spaces including sub-grade facilities, and maneuver or work in tight quarters around machinery. Employees must be available for emergency duty twenty-four (24) hours per day. Does related work as required.

TYPICAL WORK ACTIVITIES: (All need not be performed in a given position. Other related activities may be performed, although not listed)

Installs rigid, thin wall and Poly Vinyl Chloride (PVC) conduit and wiring;

Fabricates instrument and electrical control panels;

Troubleshoots Programmable Logic Controller based systems;

Orders parts and stock supplies;

Installs and makes repairs to lighting and 120 Volt AC power circuits.

Calibrates and repairs instruments and analyzers;

Inspects repairs and performs preventative maintenance tasks on electrical power distribution equipment including variable frequency drives, motor starters, generators, switches and Medium Voltage switchgear;

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Good knowledge of electrical safety principles and wiring methods as outlined in the National Electrical Code; working knowledge of basic programmable controller instructions; working knowledge of the control logic schemes that are implemented at various locations throughout the system; ability to purchase required items; ability to install and troubleshoot electrical and instrumentation equipment; ability to troubleshoot programmable controller-based control logic; ability to install and troubleshoot electrical power distribution equipment; ability to communicate orally and in writing; ability to work alone without constant supervision; ability to work well with others, mechanical aptitude; manual dexterity; good judgment and initiative; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Graduation from high school or possession of an equivalency diploma, plus EITHER:

- (A) Three (3) years of paid full-time or its part-time equivalent experience in electrical or instrumentation fields; OR,
- (B) Graduation from a technical high school or trade school with a major in the electrical or instrumentation trades plus two (2) years of paid full-time or its part-time equivalent experience as described in (A) above; OR,
- (C) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in Electrical or Instrumentation Technology plus one (1) year of paid full-time or its part-time equivalent experience as described in (A) above; OR.
- (D) An equivalent combination of education and experience as defined by the limits of (A) and (B) above.

SPECIAL REQUIREMENTS:

If you are appointed, you will be required to have a valid license to operate a motor vehicle in New York State or otherwise demonstrate your ability to meet the transportation needs of the job.

ADOPTED: June 3, 2010