

MASTER ELECTRICIAN / RHA
(Rochester Housing Authority)

DISTINGUISHING FEATURES OF THE CLASS: An employee in this class performs the more difficult and complex building, installing, maintaining, and repair tasks of rough and finished electrical systems of both medium and low voltage in and of municipal properties. Occasionally performs high voltage work, reviews high voltage projects and contract work. The incumbent works independently with general supervision from a higher-level employee. The Master Electrician may direct and review the work of outside contractors as assigned. Supervision may be exercised over the work of a staff of technical and maintenance workers. This employee may be required to respond to emergency situations outside regular work hours. Related work is performed as required.

TYPICAL WORK ACTIVITIES:

- Installs, maintains, and repairs single and multi-phase motors, starters, switch gear, variable frequency motor drives (VFD), transformers, wiring, and battery backup equipment. Motors range in size from fractional horsepower 110 vac units to 440-volt 3 phase 200 hp. Variable Frequency Drive (VFD) units.
- Maintains and operates large industrial size diesel driven generator (1200 KVA) pumps and smaller diesel and gas driven units.
- Installs conduits, race-ways, and associated wiring, including coaxial and other types of data highways for computerized systems.
- Establishes, implements, and maintains preventive maintenance schedules for electrical equipment at assigned locations.
- Evaluates system operation for electrical efficiency and recommends equipment and operational changes to reduce energy costs.
- Ensures compliance of electrical installations with the applicable sections of the National Electrical Codes and other local and state ordinances and acts in accordance with the City of Rochester General Municipal, Chapter 49 Electrical Ordinance, and the City of Rochester Electrical Safety Policy.
- Assists other technical staff and contract personnel in the programming, installation, maintenance, and troubleshooting of instrumented systems, including remote terminal units (RTU's) and programmable logic controllers (PLC's).
- Assists and trains less experienced employees in complex electrical work.
- Assigns and inspects work of subordinates, ensures necessary safety precautions are taken, coordinates workers in the completion of each work assignment, and sets daily priorities.
- Assists HVAC personnel in maintenance of HVAC equipment and related automated systems.
- Maintains the electronic fire alarm, access control, and video surveillance systems, installing alarm systems or supervising installation.
- Services the electrical systems for widely scattered city facilities, transporting tools, supplies, and crew members.
- Keeps appropriate handwritten and electronic maintenance records.
- Requisitions electrical parts and supplies to maintain inventory adequate for continuous reliable operation of electrical systems.
- Assists in planning and design of new electrical and instrumentation systems.

ENTRY LEVEL KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge of National Electrical Code and related local and state ordinances.
- Knowledge of safety procedures and accident prevention methods relevant to the electrical trade.

ENTRY LEVEL KNOWLEDGE, SKILLS, AND ABILITIES (CONTINUED):

- Ability to determine plant power factor to identify modifications for optimization of same.
- Ability to perform simple algebraic equations, including variant uses of Ohm's Law.
- Ability to read and interpret technical information and instructions.
- Ability to read electrical schematics, graphs, and charts.
- Ability to write technical reports related to work.
- Ability to explain technical information in terms understood by persons unfamiliar with the electrical trade.
- Ability to measure, cut, bend, thread, and assemble electrical conduits and wiring.
- Ability to use electrical testing equipment.
- Ability to work with others in a team situation, using tact and diplomacy.
- Ability to work in tight quarters when performing installations, adjustments, and repairs.
- Ability to work in severe weather conditions.
- Ability to climb ladders.
- Ability to make precision repairs and adjustments to electrical installations.
- Ability to drive a car.

FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:

- All entry level KSAs, PLUS:
- Knowledge of the integrated role of electrical devices in assigned systems.
- Knowledge of employee work rules, divisional policies, and departmental safety policy.

MINIMUM QUALIFICATIONS:

High school diploma or Equivalent AND:

Four (4) years of experience with medium and low voltage equipment, two (2) years of which must be as a Licensed Master Electrician.

SPECIAL REQUIREMENTS:

1. Possession of current Master Electrician license issued by the City of Rochester at time of application.*
2. Possession of a Class D New York State Motor Vehicle Operator's license at time of appointment, which must be maintained throughout tenure in this title.
3. Possession of a New York State Licensed Alarm Installer Certificate at time of appointment.*

*Licensure for #1, #2, and #3 must be maintained throughout employment in this title.

ADOPTED: APRIL 27, 2017