CLASS TITLE: **REACTOR OPERATOR (TRAINEE)**

Class Code: 02799100
Pay Grade: 20A
EO: E

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: Under close supervision, to serve s a trainee in a regularly scheduled training program in preparation for successful completion of an examination administered by the United States Atomic Energy Commission to serve as and operator of the reactor at the Rhode Island Nuclear Science Center; and to do related work as required.

SUPERVISION RECEIVED: Works under the close supervision of a licensed reactor operator; training progress is checked formal examinations, and errors are corrected and explained.

SUPERVISION EXERCISED: Exercises no supervision.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

Under close supervision, to serve as a trainee in a regularly scheduled training program in preparation for successful completion of an examination administered by the United States Atomic Energy Commission to serve as an operator of the reactor at the Rhode Island Nuclear Science Center.

To learn and understand, through reading assignments, lectures, and from practical experience, the operation of the reactor and the reactor controls system.

To receive instructions and learn the general operating characteristics of a nuclear reactor with particular emphasis on the potential hazards involved and the safety precautions which must be observed.

To learn the general design and construction of the core, pool, main shield, water handling system including valves and pumps, and their operation and effects.

To learn the operation and maintenance of the water demineralizer purification systems, beam ports, pool gate, ventilation and air conditioning systems, electrical systems, and drainage systems.

To acquire a working knowledge of the maintenance of the extensive electronic instrumentation associated with the reactor control system.

To become familiar with and acquire a working knowledge of the operation of the air monitors, emergency alarm system, various radiation warning devices, and health physics instruments.

To assist a reactor operator in loading the core of the reactor.

To assist transient scientists in setting up experiments around the main shield and in the pool.

To operate recorders and counters, recording the various reactor operations and data in official legs and forms. Such data includes reactor power levels, water flow rates, weather information, area radiation data, radiation readings in the building, fuel element usage, and pool water analysis.

To learn the basic principles and safe practices connected with the handling and control radioactive materials.

To assist scientists and health physicists in monitoring the facility and in decontamination work.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: The ability to learn the design, function, and operation of the Rhode Island Nuclear Science Center Reactor, and the ability to apply the knowledge and techniques gained to effectively accomplish the purpose of these functions, and operations; a familiarity with the basic principles of the physical sciences and mathematics; the ability to take and record required data with a high degree of reliability; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a senior high school with successful completion of courses in the sciences, such as physics and chemistry, and courses in algebra and geometry; and
Experience: Such as may have been gained through: full-time employment as a reactor operator trainee in a similar facility, or full-time employment as an engineering or electronics technician.

SPECIAL REQUIREMENT: A Reactor Operator Trainee shall be appointed for eighteen (18) bi-weekly pay periods.

Class Created: January 31, 1965
Editorial Review: 3/15/03