CLASS TITLE: **REACTOR OPERATOR (ELECTRONICS SPECIALTY)**

Class Code: 02799201
Pay Grade: 24A
EO: C

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To serve as an operator of the research reactor in the Rhode Island Nuclear Science Center: (RINSC); and to do related work as required.

SUPERVISION RECEIVED: Works under the general, and at times close, supervision of a licensed reactor operator superior from whom are received general and specific instructions; work is reviewed in process and upon completion for compliance with such instructions and for the execution of duties as a reactor operator in a competent and safe manner.

SUPERVISION EXERCISED: Usually none, but may assist in supervising the work of a reactor operator trainee.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To serve as an operator of the reactor in the Rhode Island Nuclear Science Center with responsibility for performing the following duties:

To check out the electronic and mechanical aspects of the reactor control and safety systems, including the testing and calibrating of components and recording pertinent and required data in the reactor log; when authorized, top start up the reactor by withdrawing control and safety rods (in the reactor) while monitoring the neutronic and thermal conditions of the reactor core using gauges, meters, recorders, and other devices as required, and to record pertinent and required data in the reactor log; to operate the reactor at predetermined power levels, taking data from meters, gauges, records, or other devices in the control system and recording data in the reactor log and records as required by the Rhode Island Reactor Operating Procedures and the United States Atomic Energy Commission License requirements; to report, immediately, to a designated superior, any and all deviations from normal operations; to take immediate steps to scram or shut down the reactor should and untoward incident occur or should the reactor fail to respond to the controls; when directed, or in accordance with predetermined instructions, or schedule, to shut down the reactor by inserting control and safety rods in the reactor while monitoring the neutronic and thermal conditions of the reactor core; to follow required procedures to secure all control, safety, cooling, ventilation and other systems; to be responsible for securing the building and placing the A.D.T. electric protective system in operation; and

To operate and maintain the many electronic components in the Rhode Island Reactor Facility including: the reactor control system, the building radiation monitoring system, wiring and relay complex of pneumatic tube system, health physics instrumentation, the building internal communication system, and other systems; to be responsible for "trouble shooting" electron control system equipment which has failed and to make rapid diagnosis of the cause of failure and make necessary correction so that the reactor down-time is minimal; to make recommendations to a superior concerning modifications or replacement of equipment in the reactor control complex.

When directed, or authorized, to provide assistance with electronic equipment to scientific personnel utilizing the Facility for research.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPACITIES: A working knowledge of the principles, practices, methods and techniques required for the operation of the Rhode Island Nuclear Science Center Reactor and the ability to apply such knowledge, principles, practices, methods and techniques; a working knowledge of the principles, practices, methods and techniques necessary for the operation, maintenance and calibration of the various electronic systems in this reactor facility and the ability to apply such knowledge, principles, practices, methods and techniques; a working knowledge of, and the ability to apply, elementary reactor physics and nuclear engineering; the ability to make immediate decisions and to take the proper action to cope with an engineering situation which might arise in the operation of the reactor; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

Education: Such as may have been gained through: graduation from a senior high school and the completion of training at a facility such as the Rhode Island Nuclear Science Center, or elsewhere, which will permit the United States Atomic Energy Commission to issue a reactor operator's license for the operation of the Rhode Island Nuclear Science Center Reactor; and

Experience: Such as may have been gained through: full-time employment as a reactor operator trainee electronics specialty in a facility such as the Rhode Island Nuclear Science Center; or, full-time employment as a reactor operator in another similar facility which has involved some experience in the said electronics specialty.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

SPECIAL REQUIREMENT: Must possess a Reactor Operator's license issued by the U.S. Atomic Energy Commission for the Rhode Island Nuclear Science Center Reactor at the Time of the issuance of a certificate of permanent status by the Rhode Island State Division of Personnel Administration and must maintain such licensure as a condition of employment.

Class Revised: December 22, 1985
Editorial Review: 3/15/03