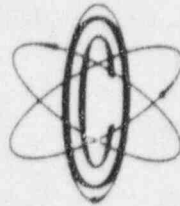




Jersey Central Power & Light Company

**OYSTER CREEK
NUCLEAR GENERATING STATION**



OPERATOR REQUALIFICATION PROGRAM

September 1974

The Jersey Central Power and Light Company requalification program, as set forth in this document, applies to the Oyster Creek Nuclear Generating Station. All licensed personnel will participate in the applicable portions of the requalification program.

The basis of the requalification program is the need to maintain operator competence and proficiency in the quest for continued safe operation. The guidelines for the requalification program are found in 10CFR55 Appendix A which became effective on September 17, 1973.

The following sections of the requalification program covers:

- I. Program Schedule
- II. Pre-Planned Lectures
- III. On-the-job-training
- IV. Evaluations
- V. Records
- VI. Standards
- VII. Accelerated Requalification Program
- VIII. Responsibilities

I. Program Schedule

The requalification program described herein has been implemented as of December 17, 1973. This date will be considered to be the starting date of each annual cycle. The applicability of each section of the program will be determined by an annual evaluation examination administered to each licensee holder. A statement of program participation will be submitted with license renewal applications every other year.

During each year, personnel shall attend the Operational Review (OR) Lecture Series on the following basis:

- (a) licensed plant administrative and technical personnel will participate in the OR lecture series as either students or instructors, except to the extent that their normal duties preclude the need for specific retraining in particular areas.
- (b) OR lecture series attendance is required of all licensed operators and senior operators who are normally on shift assignments.

During each year, licensed personnel shall participate in the Fundamentals and Systems Review (FSR) Program on the following basis:

- (a) during initial year of operation, prior to annual evaluation examination all licensed operators and senior operators attend the FSR program.
- (b) following the administration of the annual evaluation examination the licensed operators and senior operators participation in the FSR Program will be based on examination scores as identified in Section VI-Standards.

During each year all licensed personnel shall participate in on-the-job training which has the following goals:

- (a) Each licensed reactor operator or senior operator shall participate in reactivity manipulations as defined in Section III of the requalification program.
- (b) Each licensed reactor operator or senior operator shall participate in applicable surveillance testing, system checkout and equipment operation based on license level and relevance to the area of license responsibility.
- (c) Each licensed reactor operator or senior operator shall review procedures, procedure changes, plant modifications, license changes, abnormal occurrences and incidents, both on-the-job and during sessions of the OR lecture series.

Evaluations will be conducted on an annual basis as follows:

- (a) An annual written evaluation examination will be given to all licensed operators and senior operators prior to the completion of each annual cycle.
- (b) An annual oral evaluation will be administered to all licensed operators and senior operators prior to the completion of each annual cycle.

(c) An evaluation quiz will be administered periodically covering the OR series. The quiz will specifically be directed toward RO or SRO knowledge requirements.

(d) An evaluation quiz will be administered periodically covering the FSR Program Series. The quiz will be specifically directed toward RO or SRO knowledge requirements.

Participation in the OR Lectures, FSR Programs and evaluations will be on a scheduled basis except as modified by job assignments or the annual evaluation examination. Normally assignments will not be made during outages and vacation periods. Assignments will be made within the framework of normal shift rotation.

Newly licensed operators receiving a license after initiation of the requalification training program shall enter the program and participate in the annual program cycle.

If a licensed person has not actively carried out the functions of his license for a period in excess of four months he shall:

- (a) review all materials presented or scheduled to have been presented in the OR lecture series for the period of inactivity.
- (b) be given an oral examination on the applicable Section of the OR lecture series and current plant status.

Upon receipt of a satisfactory rating the licensed person shall be certified by plant management. The certification of satisfactory rating will be transmitted to the AEC prior to the individual's return to licensed duties.

II. Pre-planned Lectures

A. Operational Review (OR) Lecture Series

The following topics shall be covered during the OR Lecture Series:

- (a) Abnormal Occurrences
- (b) Plant Modifications
- (c) Operating History and Problems

- (d) Operational Q/A
- (e) Procedure Changes
- (f) Standing Orders
- (g) Emergency Procedure Review
- (h) Radiation Control and Safety
- (i) Technical Specifications
- (j) Operating Experiences - Reactor Safety and other pertinent AEC publications
- (k) Major operational evolutions (such as refueling)
- (l) Applicable portions of Title 10, Chapter I, Code of Federal Regulations

Lectures shall be held on a continuing basis and consist of a minimum of 60 hours per year.

Copies of applicable documents shall be supplied or made available to all attendees.

All topics will be covered during the OR lecture series but the program for each session will be determined by plant operations or projected operations.

Attendance of all licensed personnel will be as stated in Section I or will be recorded. Absences will be made up by reviewing lecture materials and discussions with on-shift supervisory personnel or the technical staff.

Periodic evaluation quizzes covering the content of the OR lecture series will be administered. If an unsatisfactory grade is received, makeup sessions with assigned instructors will be conducted. The makeup sessions will conclude when an oral evaluation is satisfactorily completed. The content of the quiz will be different for RO and SRO license holders and will reflect the topic areas and degree of responsibility needed by the license holder.

Examples of the materials to be used during the OR lecture series are:

- (a) Plant records and logs
- (b) Pertinent communications to and from AEC

- (c) Plant procedures and changes
- (d) Test results
- (e) Applicable training program materials

B. Fundamentals and System Review (FSR) Program

The FSR Program shall consist of on-shift self-study assignments, lectures, and possible tutorial sessions with designated technical instructors and evaluation quizzes. The study assignments will be in keeping with the license level of the individual license holder.

The following topics shall be covered, one per month, during the FSR Program:

- (a) Theory and Principles of Operation
- (b) General and Specific Operating Characteristics
- (c) Plant Instrumentation and Control Systems
- (d) Safety and Emergency Systems including plant protection systems
- (e) Normal and Emergency Operating Procedures
- (f) Radiation Control and Safety
- (g) Radioactive Material Handling Disposal and Hazards (SRO)
- (h) Administrative Procedures, Conditions and Limitations (SRO)

On-shift study assignments shall be made based on performance on the annual written and oral evaluation examinations. (During the initial year of the re-qualification program operation, all licensed personnel will participate in the entire FSR program.)

Examples of materials to be used during the FSR program are:

- (a) Training text
- (b) Plant equipment manual
- (c) Systems description
- (d) License documents
- (e) Plant procedures
- (f) Videotapes

III. On-the-job Training

Each licensed reactor operator shall manipulate the plant control to effect

reasonable reactivity changes a minimum of ten times during the two-year requalification program. Each licensed senior reactor operator shall direct the manipulation of the plant controls to effect reasonable reactivity changes a minimum of ten times during the two-year requalification program.

Reactivity manipulations which demonstrate skill and/or familiarity with reactivity control systems and which are credited to meeting on-the-job training will include, but are not limited to:

1. Control rod manipulation accomplishing
 - a) Startup to point of adding heat
 - b) Heatup or cooldown of approximately 100°F
 - c) Reactor shutdown
 - d) Power changes of approximately 75 MWe
2. Recirculation flow changes of approximately 75 MWe
3. Turbine startup and shutdown
4. Shutdown margin checks
5. Plant and reactor operations that involve emergency or transient procedures where reactivity is changing including reactor scrams and subsequent activities
6. Control rod scram insertion time tests
7. Refueling operations where fuel is moved in the core

The participation of licensed personnel in the on-the-job program will be reviewed quarterly by appropriate supervisors to insure that operators participate in a variety of evolutions. If diversity of operations is lacking, specific assignments, not considered as reactivity manipulations, may be made to ensure wide operator experience. Included in the following list are examples of additional operations to be considered in this category:

1. Surveillance testing including
 - a. containment spray system
 - b. core spray system
 - c. emergency diesel generators
 - d. isolation condenser system
 - e. standby liquid control system

2. Clean-up System Operation
3. Shutdown Cooling System and Head Cooling System Operation
4. Feedwater System Operation
5. Recirculation System (remote operation)
6. Turbine Valve Testing
7. EPR/MPR Operation
8. Inerting System Operation
9. Trip System
10. Control Room calculations, including:
 - a. heat balance
 - b. peaking factor checks
 - c. APLHGR calculations
11. Portable HP instrument use

Check-off lists shall be attached to all documents related to plant, license and procedure changes. Licensed personnel will review each documented plant, license and procedure change and sign off the check list. The check lists shall become part of the on-the-job review records.

Licensed personnel, whose job assignments are not directly related to plant operations will attempt to actively participate in control room operation an average of 48 hours per year. During this period, licensed operators will participate in whatever activities are in progress.

The BWR simulator at Morris, Illinois, may be used to supplement station activity in meeting the requirements of this section. As such, credit will be taken for simulator operation involving applicable reactivity manipulation, normal and emergency procedure review and transient responses. However, final evaluation of licensed operator performance will be made at the Oyster Creek Station by the plant staff.

IV. Evaluations

An annual written evaluation examination will be administered to all licensed

personnel.

1. The examination will simulate the examination normally administered by the Atomic Energy Commission.
2. Reactor Operator will take Sections A through G of the examination while the senior reactor operators will take Sections A through L.
3. The examination, examination answers and a grading key will be prepared in advance.
4. The examination results will be used to identify specific FSR lecture series topics to be covered by each licensed individual during the subsequent annual requalification program cycle.
5. The examination will be administered and graded by a member of the plant technical, management staff or consultant.

The person responsible for the preparation of the examinations and answers will be given credit for taking the examination and scoring a grade of 85. Periodic written evaluation quizzes will be administered covering the material presented or reviewed in both the OR lecture series and FSR programs.

1. The quizzes shall be appropriate for the license level of the participating personnel.
2. The quizzes may be administered in either the closed book, or open book format, as classroom, on-shift or take-home quizzes.

Systematic observation and documentation of operator performance will be conducted semi-annually by supervisory and/or training staff members. Unsatisfactory performance will require a conference between the licensee and supervisor. This conference is to identify unsatisfactory areas and remedial action. Continued unsatisfactory performance will require removal from operational responsibility and assignment to an accelerated requalification program.

An annual oral evaluation examination, using a check list, will be administered to all licensed personnel. The oral examination will cover the following areas:

- (a) action in event of abnormal conditions

- (b) Action in event of emergency conditions
- (c) response to plant transients
- (d) instrumentation signal interpretation
- (e) procedure modification
- (f) plant modifications
- (g) technical specifications
- (h) emergency plans

V. Records

Records of licensed personnel performance on all written evaluation examinations and quizzes shall be available for AEC review for the two annual requalification cycles prior to license renewal application. These records shall include:

1. Examination and quiz questions
2. Answer sheets and grade keys
3. Examination papers and work sheets

Records of participation in all OR lectures and FSR programs will be available for AEC review for the two annual requalification cycles prior to license renewal application. These records shall include:

1. Attendance records
2. OR lecture content
3. FSR assignment
4. Absences and makeup sessions
5. Assignment check-off lists
6. Document review lists

Records of annual oral evaluation examinations shall be made available for AEC review for the two annual requalification cycles prior to license renewal application.

Records of all on-the-job activities shall be available for AEC review for the two annual requalification cycles prior to license renewal application.

These records shall include:

1. Reactivity control manipulation
2. Equipment operation
3. Simulator participation

VI. Standards

The following standards shall apply to the requalification program:

Lecture Attendance

1. Licensed personnel shall participate in the OR lecture series as stated in Section I. Any absences must be made up as specified in Section II.
2. During the initial year of the program operation (December 17, 1973 to December 17, 1974) all licensed personnel shall participate in the entire FSR program.
3. Following the completion of the annual written evaluation examination, license holders who score less than 80% in any given examination section will participate in the FSR assignment for that section, including pertinent sections covered in a periodic evaluation quiz:
4. Following the completion of the annual evaluation examination license holders who score in the range of 80% to 85% on any given section are encouraged but not required to participate in applicable FSR assignments. They will be required to take an evaluation quiz associated with these assignments.
5. License holders who score higher than 85% on any given section of the evaluation examination are not required to answer portions of an evaluation quiz on that section.
6. Satisfactory completion of evaluation quizzes covering either the OR lecture series or FSR program will be 80%. If a grade below 80% is received by a license holder, a deficiency is assigned and must be made up in accordance with Section II of the requalification program.

On-the-job Training

1. Quarterly review of reactivity control manipulations or direction must indicate

a range of experience as listed in Section III. If this is not demonstrated, a deficiency is assigned and corrected as specified in Section III.

2. All document review check-off lists must be completed or a deficiency is assigned and the appropriate documents must be reviewed.
3. Annual review of licensed personnel whose job assignments are not directly related to plant operations should show approximately 48 hours of plant operation assignments per year. If this is not complete, and if possible, the personnel will be relieved of their normal job responsibilities and assigned to active control room duty until the time is made up. The BWR simulator at Morris, Illinois may be used to substitute for plant operation assignments.

Evaluations

1. A grade of 70% or less on the annual written examination is considered to be a deficiency. Upon receiving a grade of 70% or less, the license holder will be relieved of responsibilities and placed into an accelerated requalification program. Upon completion of the accelerated program, the license holder will be given an oral examination and subjective evaluation by the operations supervisor or training coordinator who will determine when the operator should be reinstated and assume his licensed responsibilities.
2. An unsatisfactory evaluation on the annual oral examination will require that discussions of deficiencies take place between the license holder and either the operations supervisor or training coordinator. A second oral evaluation examination will be administered. If performance is again unsatisfactory, the licensee holder will be relieved of responsibilities and placed into an accelerated requalification program as stated in 1 above.

VII. Accelerated Requalification Program

The training coordinator and his staff are responsible for:

1. Assigning instructors for the OR lecture series

2. Determining FSR assignments for individual operators
3. Maintaining and reviewing all records
4. Assigning deficiencies, determining appropriate action to clear deficiencies and clearing deficiencies upon satisfactory completion of assigned action
5. Constructing annual written evaluation, examination, answers and grade key.
6. Grading of the annual written examination
7. Arranging accelerated requalification programs as may be necessary
8. Defining oral evaluation procedures
9. Scheduling necessary simulator time
10. Preparing a licensee's application for license renewal

The operations supervisor is responsible for:

1. Evaluation of performance of all license holders
2. Meeting with licensee holders who receive unsatisfactory rating
3. Reviewing on-the-job training performance
4. Certifying operator qualification when returning from a four-month absence from operation.