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VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 14, 1977



Mr. Edson G. Case, Acting Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 457
PO&M/ES:dgt
Docket Nos. 50-280
50-281

Attn: Mr. Paul F. Collins, Chief
Operator Licensing Branch

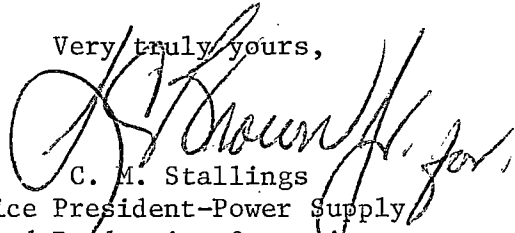
License Nos. DPR-32
DPR-37

Dear Mr. Case:

Enclosed are 40 copies of our revised Licensed Operator Requalification Program. The revised program has been discussed with your staff and is submitted pursuant to 10CFR 55, Appendix A.

An early indication of your acceptance will be appreciated.

Very truly yours,


C. M. Stallings
Vice President-Power Supply
and Production Operations

Enclosure

LICENSED OPERATOR

REQUALIFICATION PROGRAM

October 5, 1977

VIRGINIA ELECTRIC AND POWER COMPANY

Vepco

REQUALIFICATION PROGRAMS FOR NUCLEAR OPERATORS

A. PURPOSE

The purpose of the operator requalification program is to maintain a level of operator skill and knowledge consistent with safe and efficient plant operation. In addition, the program will serve to demonstrate the continued competence of operators and senior operators to perform their licensed duties, in accordance with Section 55.33 of 10 CFR Part 55.

This program describes the minimum combination of lectures, on-the-job training, evaluation methods and records for requalification of licensed individuals at the Surry and North Anna Power Stations.

B. DEFINITIONS

As used in this program:

1. "Operator" means any individual who possesses an operator license pursuant to 10 CFR Part 55.
2. "Senior Operator" means any individual who possesses a senior operator license pursuant to 10 CFR Part 55.
3. "Licensed Staff Member" means any individual who maintains an operator or senior operator license for the purpose of providing backup capability to the normal operating staff. Such individuals may include, but are not limited to, Station Manager, Superintendent - Station Operations, Operating Supervisor, Assistant Operating Supervisor, Nuclear Training Supervisor, Nuclear Training Coordinators, and Engineers.

4. "Controls" means apparatus and mechanism, the manipulations of which directly affect the reactivity or power level of the reactor.
5. "Control Manipulation" means manipulation of any apparatus or mechanism which directly affects the reactivity or power level of the reactor.

This shall mean:

- a. Startup to the point of adding heat.
 - b. Orderly shutdown.
 - c. Manual control of steam generator level during startup or shutdown.
 - d. Operation of the main turbine controls in manual during startup.
 - e. Boration during power operation.
 - f. Dilution.
 - g. Operation of the manipulator crane while moving fuel in the core during refueling.
 - h. Operation of the rod control system in manual during a power change of greater than 10%.
 - i. Operation of the rod control system in manual prior to and during generator synchronization.
6. "Acceptable Simulator" means a simulator which reproduces the general operating characteristics of Surry Units 1 and 2.
 7. "Operating Personnel" means those operators and senior operators who are actively engaged, on a routine basis, in manipulating or directing the manipulation of the controls. Such individuals include, but are not limited to, operators and senior operators assigned to a shift.

8. "Inactive Operators and Senior Operators" means those operators or senior operators who are not participating in the requalification program or who have been absent from the facility for a period of longer than four (4) months.
9. "Licensed Duties" means those duties which involve the manipulation or direction of the manipulation of the controls.
10. "Requalification Cycle" means two (2) year period in which the Retraining Program will be covered on a recurring basis. Any personnel issued an NRC License during the cycle, will be entered into the program upon receipt of the license.

C. TRAINING PROGRAM

1. Annual Lecture Series

The requalification program shall include preplanned lectures on a regular and continuing basis. The minimum number of lectures in any calendar year shall not be less than six, evenly spaced throughout the year and taking into consideration heavy vacation periods and infrequent operations, such as refueling periods. Lectures may be deferred due to unanticipated shutdowns or other special operations. However, these lectures should be conducted at a later date. The annual lectures series shall cover the subjects listed below with stress placed on weak areas determined by the previous annual written examination.

- 1) Reactor Theory
- 2) Thermal/Hydraulic Design
- 3) Instrumentation and Control
- 4) Reactor Plant Transients
- 5) Normal Operating Procedures
- 6) Emergency/Abnormal Operations and Procedures
- 7) Operating Experience and Recent Problems
- 8) Radiological Safety and Health Physics
- 9) Water Chemistry Control
- 10) Technical Specifications

An annual schedule of subject matter to be covered during the lecture period shall be promulgated.

All operating personnel, as defined in Section B, should attend the annual lecture series. If any operating personnel should miss the lecture, every effort will be made to reschedule the lecture during the year.

Licensed staff personnel as defined in Section B will be exempt from attending the lecture series providing they attain a grade of 80 on all sections of the annual examination. Any person making less than 80 on a section will be required to attend those lectures to cover his deficiencies. He will be reexamined in those sections where he was deficient.

Training aids, such as video tapes and films, may be used in lieu of an instructor for the lecture series. However, the use of such training aids shall not constitute more than 50% of the lecture series. A test will be administered at the end of each lecture session to determine operator comprehension of the material covered.

2. On-The-Job Training

Each operator shall perform and each senior operator shall either perform, or direct the performance of, at least ten (10) control manipulations during the requalification cycle. These manipulations shall be a mix of the acceptable control manipulations.

All operators and senior operators shall demonstrate satisfactory operation of plant equipment by actual manipulation of the equipment or by walk-through of the procedural steps required.

An acceptable simulator may be utilized in meeting the requirements for reactivity control manipulation and understanding of plant equipment. However, every effort should be made to obtain actual hands-on experience in the plant in accomplishing the above.

3. Changes to Design and Documentation

Pertinent changes to procedures, precautions, setpoints and limitations, facility design, facility license, technical specifications and any other information of interest will be promulgated as required reading.

The information will be placed in the required reading book in the Control Room. Each operator will read and sign the attached sheet signifying completion. The Shift Supervisor will certify that all personnel assigned to him have, in fact, read the information. The Operating Supervisor will assign material to the required reading book with a completion time for each document. A file to document completion of required reading will be maintained in the Records Vault. These changes should also be reviewed during the classroom phase.

4. Abnormal and Emergency Procedures Review

The abnormal and emergency procedures shall be reviewed on an annual basis. A schedule will be promulgated monthly designating those procedures to be reviewed. Where conditions are such that review cannot be done within a specific month, those procedures shall be rescheduled to complete the review within the year. A record of this review shall be maintained by the Nuclear Training Supervisor.

D. EVALUATION

1. Annual Examination

All operators and senior operators shall take a written examination which shall be administered at least once per calendar year. The annual written examination shall contain the same categories as an NRC examination consistent with the type of license held and shall be comparable in the level of difficulty. An overall grade of less than 70% shall require removal from licensed duties and participation in the accelerated requalification program.

2. Written Test

A written test should be administered at the completion of each lecture session to ensure that the participants have learned the material presented. A grade of less than 80% shall require additional training in the subjects covered; either by self-study or additional lectures. Retesting in the unsatisfactory areas shall be required.

3. Operational Evaluation

A systematic observation and evaluation of an individual's performance and competency including actions taken, or to be taken, during actual or simulated abnormal and emergency conditions shall be conducted at least once each year. This evaluation shall be in addition to the immediate supervisor's normal continuous evaluation. The Surry simulator may be used for systematic evaluation of performance. The evaluation may be conducted by a licensed Senior Reactor Operator assigned by the Nuclear Training Supervisor or the Operating Supervisor.

E. ACCELERATED REQUALIFICATION PROGRAMS

Specifics of accelerated requalification programs are not included because of the wide variety that may be required based on an individual's need. However, an overall grade criterion of 70% or greater on any written examination is required to indicate successful completion of the accelerated requalification program.

F. LICENSED STAFF MEMBERS

As a minimum, licensed staff members, as defined in Section B, shall:

1. Be administered the annual written examination and participate in the lecture series based on the results thereof.
2. Manipulate the controls or supervise the manipulation of the controls through ten (10) reactivity changes. An acceptable simulator may be used to accomplish this.
3. Systematically review design changes, procedure changes and facility license changes.
4. Systematically review the contents of all abnormal and emergency procedures on a regularly scheduled basis.
5. Be systematically evaluated regarding actions to be taken during simulated abnormal and emergency conditions by a walk-through of the steps of the procedures.

G. INACTIVE OPERATORS AND SENIOR OPERATORS

It is anticipated that some licensed operator or senior operators will be absent from the units for which they hold licenses for periods longer than four (4) months. Prior to resuming activities as an operator or senior operator, at the licensed facility, a review series will be completed covering all operating, abnormal, administrative, emergency procedures and any unit design changes that may have occurred during his absence. In addition, a period of one (1) month of operating under the guidance of a licensed operator will be conducted, after which he will be required to pass a comprehensive oral examination administered by the Training Department or Operating Supervisor. If this is satisfactory, he will resume his activities and immediately be placed in the normal retraining cycle.

H. TRAINING COORDINATORS

The Nuclear Training Supervisor and Training Coordinators who prepare, administer and grade the annual written examination need not take the examination.

I. RECORDS AND DOCUMENTATIONS

Records of the requalification program shall be maintained to document each licensed operator's and senior operator's participation in the requalification program. The records shall contain copies of written examinations administered, the answers given by the licensee, result of evaluations and documentation of any additional training administered in areas in which an operator or senior operator has exhibited deficiencies.

J. RESPONSIBILITY

The Supervisor of Nuclear Training shall be responsible for the implementation of the Requalification Program. The station Nuclear Training Supervisor shall be responsible for the conduct and administration of the requalification program.