GINNA STATION
UNIT #1
COMPLETED
DATE:-
TIME:-

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 3

PROCEDURE NO. A-102.14 REV. NO. 3

R.E. GINNA OPERATOR REQUALIFICATION PROGRAM

Q. A. REVIEW
R. A. Snaider 5/9/80

TECHNICAL REVIEW

PORC 5/5/80

TR Schuler
QC REVIEW

5-9-80
DATE

APPROVED FOR USE

PLANT SUPERINTENDENT

5-21-80
DATE

QA X NON-QA _____ CATEGORY 1.0

TRAINING

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 13 PAGES

A-102.14

R.E. GINNA OPERATOR REQUALIFICATION PROGRAM

1.0 PURPOSE:

1.1 To establish the Operator Requalification Program as an Administrative Order.

2.0 REFERENCES:

2.1 10 CFR 55 APPENDIX A

2.2 R. E. Ginna Operator Requalification Program

2.3 Letter "Qualification of Reactor Operators" from Harold Denton dated 3/26/80

2.4 ANS 3.1 1978

3.0 INSTRUCTIONS:

3.1 Attached to this Administrative Order is the Operator Requalification Program. (Attachment "A") Adherence to this program shall be mandatory.

3.2 The Superintendent will be notified of each individual required to attend a specific lecture after the annual exam.

3.2.1 All individuals shall be notified as to the lectures they will be required to attend.

3.3 After the Annual Exam Session a notice signed by the Plant Superintendent shall be forwarded to the Operations Engineer listing the licensed staff members who have not taken the annual exam and those individuals shall not be allowed to perform licensed activities until they have met the licensing requirements of passing the annual exam.

4.0 RECORDS:

4.1 See Section 8 of Attachment A.

ATTACHMENT "A"

R. E. GINNA NUCLEAR POWER PLANT

OPERATOR REQUALIFICATION PROGRAM

1. PURPOSE:

1.1 The purpose of this program is to ensure that the licensed operators and senior operators at Ginna Station maintain their proficiency and knowledge in all phases of plant operations. This program is developed to fulfill the requalification requirements set forth in 10 CFR 55 Appendix A, Letter "Qualification of Reactor Operators" from Harold Denton dated 3/26/80 and ANS - 3.1 1978.

1.2 The Ginna Plant Requalification Program is scheduled to be completed and repetitive on a two year basis. The program shall consist of classroom lectures, on-the-job training and simulator training on a preplanned basis.

2. DEFINITIONS

2.1 Control Manipulations - Prior to August 1, 1980 accepted manipulations are 1 through 6 below. After August 1, 1980 all manipulation shall be performed during term of license with * items performed annually.

* (1) Reactor startup to include a range that reactivity feedback from nuclear heat addition is noticeable and heatup rate is established.

(2) Plant shutdown.

* (3) Manual control of steam generator feedwater during startup or shutdown.

(4) Boration or dilution of reactor coolant system during power operation $\geq$ 10%.

* (5) Reactor power level changes $\geq$ 10% by manual manipulaton of rod control system.

2. DEFINITIONS (Cont'd)

(6) Reactor power level changes ≥ 10% by turbine electro-hydraulic control.

* (7) Loss of coolant including significant steam generator tube leak.

* (8) Loss of coolant inside containment.

* (9) Loss of coolant outside containment.

* (10) Large loss of coolant leak including leak rate determination.

* (11) Small loss of coolant leak including leak rate determination.

* (12) Loss of coolant including saturated reactor coolant response.

(13) Loss of instrument air.

(14) Station Blackout.

* (15) Natural Circulation.

(16) Loss of Condenser Vacuum.

(17) Loss of Service Water.

(18) Loss of Residual Heat Removal Cooling.

(19) Loss of Component Cooling or cooling to individual component.

(20) Loss of Normal Feedwater.

* (21) Loss of Normal and Auxiliary Feedwater.

(22) Loss of Instrumentation Bus.

(23) Control Rod Misalignment.

(24) Inability to Drive Control Rods.

(25) Immediate Boration.

(26) Fuel Cladding Failure or High Activity in Reactor Coolant System.

(27) Turbine or Generator Trip.

(28) Malfunction of Tavg controls.

(29) Malfunction of Pessurizer Pressure or Level Controls.

(30) Reactor Trip.

2. DEFINITIONS (Cont'd)

(31) Main Steam Line Break inside or outside containment.

(32) Nuclear Instrument Failure.

2.2 Plant Evolutions

Plant evolutions shall be any event other than routine operations occurring during steady-state, transient or shutdown conditions and may include the following:

(1) Reactor startup

(2) Reactor shutdown

(3) Turbine runback

(4) Reactor trip

(5) Plant cooldown

(6) Plant heatup

(7) Turbine power level change other than adjustment for calorimetric

(8) Periodic tests

(9) Refueling operations

2.3 Job Cross-Training

Job cross-training for shift personnel shall consist of assuming the duties and performing the functions of other shift classifications. Each nonshift licensed operator or senior operator will satisfy licensing proficiency requirements by any of the following:

a. Duty Engineer assignment

b. Assistance to the shift in supervising activities covering control room operations, testing, radioactive waste, releases, plant maintenance.

c. Control Room watchstanding

d. Conduct of drills or instruction in control room systems and procedures.

2. DEFINITIONS (Cont'd)

The nonshift licensed operator or senior operator will satisfy these requirements for at least a total of 8 hours every 4 months.

2.4 On-Shift Discussions

On-shift discussions shall include reviews of procedures, discussions of plant operations and/or other specific material assigned by the Training Coordinator or Shift Supervisor or STA.

3. CLASSROOM LECTURES

3.1 The classroom lectures shall be scheduled and shall include the following topics:

(1) Reactor theory and principles of operation

(2) Radiation control and safety

(3) Power Plant secondary systems and applicable procedures

(4) Reactor primary and engineered safety systems with applicable procedures

(5) Plant instrumentation, protection and control systems

(6) Electrical systems and applicable procedures

(7) Technical specifications

(8) Refueling systems, operation and applicable procedures

(9) Plant operating characteristics

(10) Heat transfer, fluid flow and thermodynamics

(11) Mitigating core damage during accidents

(12) Administrative, operating, emergency and other applicable procedures

(13) Applicable portions of Title 10, Code of Federal Regulations (19, 20, 50, 55, 71, 100). Title 49 CFR (170 - 199)

(14) System Modifications which are pertinent to the safe operation of the plant as determined by the Training Coordinator. Individuals not attending the classroom lecture will be assigned to review

3. CLASSROOM LECTURES (Cont'd)

and acknowledge System Modifications pertinent to the safe operations of the plant.

3.2 Each of the listed topics shall be presented at least once during the two-year cycle. The completion of each topic shall be documented by a written examination, with exceptions as noted per Sections 7.2 and 7.3.

3.3 Each shift shall be available for scheduled lectures for one four-day week out of every five weeks with the exception of the refueling, maintenance and summer vacation period.

4. ON-THE-JOB-TRAINING

4.1 All licensed operators and senior operators shall participate as much as possible in plant control manipulations involving reactivity changes to demonstrate their skill and familiarity with reactivity control systems. On-the-job training shall also be participated in as much as possible and include the following:

(1) Plant evolutions

(2) Control manipulations

(3) Job cross-training

(4) On-shift discussions

4.2 Licensed Reactor Operator Manipulations - Each Licensed Reactor Operator shall manipulate the controls as noted in 4.4 during the term of his license.

4.3 Licensed Senior Reactor Operator Manipulations - Each licensed Senior Reactor Operator shall manipulate the controls or direct the activities of operators during plant control manipulations as noted in 4.4 during the term of his license.

4. ON-THE-JOB TRAINING (Cont'd)

4.4 Ten control manipulations shall be required and consist of a combination of the first six control manipulations listed under 2.1 until August 1, 1980. After August 1, 1980 all listed manipulations shall be required during the term of his license, with * items required annually.

4.5 The normal control manipulations (1-6) must be performed. An appropriate simulator may be used to satisfy the requirements for control manipulations. Control manipulations during abnormal or emergency operations must be walked through with, and evaluated by a member of the training staff as a minimum. Simulator performance is greater than minimum. These conditions take effect August 1, 1980.

4.6 Persons holding NRC licenses, but not actively engaged in regular plant operation for a period of four months, shall be refamiliarized and examined before returning to licensed required positions. The refamiliarization program shall include review of:

(1) Procedural changes

(2) License changes

(3) Plant system modifications

(4) Plant incidents

The completion of the refamiliarization program shall include written and oral examinations to document that the licensee is up-to-date and familiar with the plant. The Training Coordinator shall document the satisfactory completion of the refamiliarization program by the licensee and the NRC shall be notified of this fact.

4.7 Emergency Procedures may be reviewed by classroom lecture, on-shift discussion or individual study. These procedures shall be reviewed twice each year and documented on the Emergency Procedure Review acknowledge sheets.

4. ON-THE-JOB TRAINING (Cont'd)

4.8 Relevant incidents which occur at R.E. Ginna or other licensed power reactors shall be reviewed by licensed operators by on-shift discussion with STA's or Shift Supervisor or during classroom lecture. The STA's review LER's regularly and discuss relevant incidents with their shift or notify training to include in classroom lectures.

5. SIMULATOR TRAINING

5.1 Simulator training may be used to demonstrate skill and/or familiarity with reactivity control systems to meet the requirements of 10 CFR 55, Appendix A, paragraphs 3a and 3b, if the simulator reproduces the general operating characteristics of Ginna Station and the arrangement of the instrumentation and controls of the simulator is similar. Under the same conditions the simulator may be used for reactivity manipulations for emergency or abnormal conditions.

5.2 The procedures used during simulator training shall be R.E. Ginna Operating and Emergency Procedures as applicable.

5.3 Upon return from simulator training and prior to performing licensed duties at Ginna, the licensed operator shall be given an oral mini exam on the Ginna control board to demonstrate familiarity with the Ginna controls. This exam shall be conducted by a licensed individual selected by the Training Coordinator.

5.4 The accomplishment of simulator training and familiarity demonstration shall be documented.

6. OTHER TRAINING TECHNIQUES

6.1 Alternate training such as video tapes, films and other training aids may be used to supplement classroom lectures. These alternate training

6. OTHER TRAINING TECHNIQUES (Cont'd)

6.1 techniques shall be used as additional or supplemental training for licensed personnel. Self-study using training aids shall be documented. Alternate training techniques shall not be more than 50% of the classroom lecture time.

7. EVALUATION

7.1 Evaluation of licensed personnel shall include examination at the completion of each lecture topic and on an annual basis. Evaluation shall also include written reports by supervisors and/or training personnel during actual and simulated operating conditions.

7.2 The annual exam shall cover all topics in the requalification program and be given at the beginning of each year. The questions shall be of the NRC type and the exam shall be divided into sections. Satisfactory completion of the Requalification Annual Exam shall be indicated by a minimum overall grade of 80% and a grade 70% or greater in each section. Those not satisfactorily completing the Requalification Annual Exam shall be removed from the licensed required position and assigned to retraining until they can satisfactorily pass a requalification exam administered by the training section. This grade criteria takes effect with the 1981 annual exam.

Anyone passing the overall annual exam and receiving a grade of 80% or greater in a particular area shall not be required to attend the next series of lectures on that topic or take the associated exam.

Anyone passing the overall annual exam, but not receiving a grade of 80% or greater in a particular area shall be required to attend the next series of lectures on that topic and take the associated exam. The lecture topic will be scheduled in a timely manner or additional individual study shall be provided for persons not receiving a grade of 80% on a particular topic.

7. EVALUATION (Cont'd)

7.3 Exams given at the end of each lecture topic shall indicate that the licensee has satisfactorily completed the topic if he received a grade of 80% or greater. Those not receiving a grade of 80% shall be assigned additional work. A re-examination shall then be given after the completion of the assigned work and a grade of 80% or greater shall be necessary to indicate the satisfactory completion of the topic.

7.4 The licensed individual(s), who prepare(s) and grade(s) the annual examination, need not take the annual exam. The licensed individual(s) who prepare(s) and grade(s) the lecture topic associated quiz(s) need not take the quiz.

7.5 The annual exam shall also be used to evaluate and improve the requalification program. Such evaluation shall attempt to identify areas where additional classroom lectures or other type of training can improve personal or group plant operating ability.

8. TRAINING PERSONNEL

R.E. Ginna License training program instructors shall have Senior Reactor Operator Licenses or be preparing for license examination when instructing subjects such as

(1) R.E. Ginna primary and safety systems

(2) R.E. Ginna integrated response topics

(3) R.E. Ginna transient responses

8.1 The instructors shall participate in a familiarity program to keep them current in plant changes. This will include:

8.1.1 Procedure changes, review and acknowledge procedure changes in Control Room Acknowledge Book.

8.1.2 Current operating history - review and acknowledge monthly Operations Report. After review this will be included in Requalification Training Material.

8. TRAINING PERSONNEL (Cont'd)

8.1.3 Current R.E. Ginna LER's and Other Relevant LER's - review and acknowledge events provided by the Technical Assistant to the Plant Superintendent - Operations Assessment. After review they shall be included in Requalification Training material.

9. DOCUMENTATION

Documentation of each licensed person's involvement in the requalification program shall be maintained by the licensee or the Training Coordinator for the period designated below. After this period the documentation shall be forwarded to Central Records unless otherwise stated to be maintained in accordance with A-1701.

9.1 Records maintained by the licensee for one year after which they shall be reviewed by the Training Coordinator and forwarded to Central Records and filed under Personnel Histories of 8.12 of A-1701. They include:

(1) Job Cross Training

(2) Reactivity Changes

(3) Plant Evolutions

(4) On-Shift Discussions

9.2 Records and documents maintained by the Training Coordinator for one year and then submitted to Central Records and filed under Personnel Histories 8.12 of A-1701. They include:

(1) Classroom Training Records

(2) Simulator Training

(3) Personnel Evaluations

9.3 Records and documents maintained by the Training Coordinator and forwarded to Central Records at different time periods as noted in each case include:

9. DOCUMENTATION (Cont'd)

9.3 (1) Examination given (annual and session quiz) including key shall be submitted quarterly to Central Records and filed under 8.7 of A-1701.

(2) Answers to examination or quizzes given by licensee shall be maintained by the Training Coordinator for two years or until reviewed by the NRC, whichever comes first. After this the answers may be disposed of.

(3) Completed Emergency Review acknowledge sheets to document Emergency Procedures have been reviewed, shall be forwarded to Central Records after review by the Training Coordinator and filed under 8.7 of A-1701.

(4) Completed Technical Specification acknowledge sheets to document that Technical Specification changes have been read and understood for those persons who have not attended the associated instruction shall be forwarded to Central Records after review by the Training Coordinator and filed under 8.7 of A-1701.

(5) Completed System Modification review sheets for those persons who have not attended the associated instruction shall be forwarded to Central Records after review by the Training Coordinator and filed under 8.7 of A-1701.

(6) Documentation of additional training for those individuals failing the annual exam or lecture topic quiz, including applicable classroom lecture attendance, assigned individual study, and make-up examinations shall be maintained by the Training Coordinator for the year and then forwarded to Central Records to be filed under 8.12 with the exception of make-up examination answer which shall be maintained in accordance with 8.3(2) above.

9. DOCUMENTATION (Cont'd)

9.4 Central Records shall maintain completed procedure acknowledge sheets to document that procedure changes pertinent to the operation of the plant have been read and understood.

9.5 All documentation required to establish a licensee's satisfactory completion of the requalification program shall be assembled and verified by the Training Coordinator prior to submission of the license renewal request to the NRC. License application and renewal information shall be submitted to Central Records as submitted to the NRC and filed under 8.12 of A-1701.

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NRR Reading
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Docket No. 50-244

AUG 2 2 1980

Mr. Leon D. White, Jr.
Vice President
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, New York 14649

Dear Mr. White:

The attached enclosure supplements our letter of February 14, 1980, regarding the results of the vital area analysis previously conducted at the R. E. Ginna Station. The enclosure contains the complete list of vital areas and equipment resulting from the vital area analysis.

Certain areas of your physical security program may need realignment beyond the changes submitted with your letter of March 24, 1980. Accordingly, you should review your existing security plan to assure that the vital areas and equipment identified in the enclosure are being protected in accordance with the requirements of Section 73.55(c)(1) and 73.55(d)(7) of 10 CFR Part 73.55. Please advise us of the results of this review within 60 days of receipt of this letter and describe any proposed changes to your physical security program.

The enclosure to this letter and the enclosure to your letter of March 24, 1980, are being withheld from public disclosure pursuant to 10 CFR Section 2.790(d).

Sincerely,

Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
As stated (withheld
from public disclosure)

cc w/o enclosure:
See next page

OFFICE	DL:ORB #5/LA	DL:ORB #5/PM	DL:ORB #5/C			
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DATE	8/12/80	8/21/80	8/22/80			

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 22, 1980

Docket No. 50-244

Mr. Leon D. White, Jr.
Vice President
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, New York 14649

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Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
As stated (withheld from public disclosure)

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ENCLOSURE

GINNA NUCLEAR POWER STATION

VITAL AREAS AND EQUIPMENT

*1. Upper level spent fuel area (for up to 28 days after shutdown on a refuel)

*2. Reactor Containment.

*3. Relay Room - Located underneath the control room - Elevation 271' 0".

*4. Auxiliary Feedwater System Room - Located in the Intermediate Building at elevation 253' 0" north side.

5. Motor Control Center 1-C - Located in the Auxiliary Building at Elevation 271' 0".

6. Motor Control Center 1-D - Located in the Auxiliary Building. Elevation 253' 0" north side.

*7. Control Room

8. Battery Room #1B.

9. Diesel Generator Room #1.

10. Screen House - Elevation 253' 0".

11. Auxiliary Building - Elevation 253' 0".

12. Room adjacent to the Battery Room.

13. Gas Decay Tanks Room. Elevation 253' 0" of Auxiliary Building.

*14. Intermediate Building Sub-Basement Elevation 219' 0".

15. Diesel Generator Room #2.

16. 235' 8" - Elevation of the Auxiliary Building.

17. Refueling Water Storage Tank.

18. 278' 4" - Elevation of the Intermediate Building.

19. Condensate Storage Tank.

20. 253' 6" - Elevation of the Turbine Building.

* TYPE I VITAL AREAS

SECURITY-RELATED INFORMATION
10 CFR 2.790(d) INFORMATION

21. Standby Auxiliary Feedwater Pump Building - Elevation 271' 0".

22. Motor Control Center 1-L-Located in the Auxiliary Building at Elevation 271' 0".

23. Standby Auxiliary Feedwater System Room.

24. Motor Control Center 1-M - Located in the Auxiliary Building at Elevation 253' 0".

25. Residual Heat Removal Pump Room - Elevation 219' 0" of Auxiliary Building.

26. Residual Heat Removal Heat Exchanger Room - Elevation 235' 8" of Auxiliary Building.