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D.J. Skovholt	1 signed			XXX	XXX

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DESCRIPTION:
Ltr re our 8-23-73 ltr...concerning the Operator Requalification Program for Kewaunee Nuclear Power Plant.....trans the following....

ENCLOSURES:
KEWAUNEE OPERATOR REQUALIFICATION PROGRAM

Facility File

(1 cy encl rec'd)

PLANT NAME: Kewaunee

FOR ACTION/INFORMATION 1-22-74 JB

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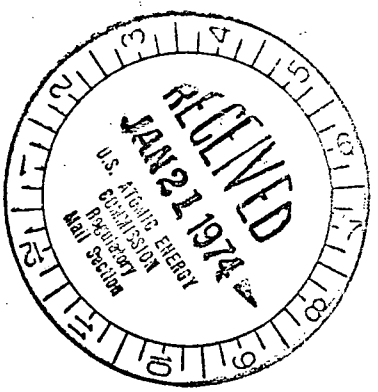

Mr. D. J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Skovholt:

Subject: Docket 50-305
Kewaunee Nuclear Power Plant
Operator Requalification Program

Reference: Letter Mr. D. J. Skovholt to Mr. E. W. James
Dated August 23, 1973

This letter and attachment is in response to your referenced letter and is an amplification of our operator retraining program as discussed in Section 12.3.2 of the Final Safety Analysis Report.

We believe that the program adequately describes the detail of the operator requalification program and that it meets the intent of 10 CFR Part 55, Appendix A.

Very truly yours,

E. W. James
Senior Vice President
Power Generation & Engineering

EWJ:sna
Attachment: Kewaunee Operator
Requalification Program

cc - Mr. Steven E. Keane, W/A

KEWAUNEE OPERATOR REQUALIFICATION PROGRAM

1.0 Purpose

The Operator Requalification Program is a requirement of Appendix A, 10 CFR 55, designed to ensure that all licensed Reactor Operators and Senior Reactor Operators maintain the proficiency to continue to operate the Kewaunee Nuclear Power Plant safely, efficiently, and within the requirements of the Technical Specifications.

2.0 Applicability

This program applies to licensed Reactor Operators and Senior Reactor Operators who are required to retain their licensed status.

3.0 References

3.1 10 CFR 50.54 (i) (i-1)

3.2 10 CFR 55, Appendix A - Requalification Programs for Licensed Operators of Production and Utilization Facilities.

3.3 ACD 13.3 - Operator Training.

4.0 Scope

4.1 On-Site Requalification

Since the licensed Reactor Operators cannot leave the site for obvious reasons for any extended period of time, the major effort of the requalification program must be carried out on site. This will be achieved through formal classroom lectures and on-shift training. The program will cover a period not to exceed (2) years.

4.1.1 Formal Classroom Lectures

a. Reactor Physics including Reactor Theory and Operation.
   1. Atomic Physics
   2. Nuclear Physics
   3. Neutron cycle and k-effective
   4. Subcritical multiplication
   5. Reactor poisons
   6. Reactivity coefficients and defects
   7. Reactivity controls
   8. Shutdown margin and rod insertion limits
   9. Effects of operating conditions upon flux and power distribution.

b. Water and Radiation Chemistry.
   1. Purpose of and methods of chemistry control
   2. Corrosion control
   3. Radiation chemistry
   4. Chemistry specifications and criteria
   5. Corrective actions

c. Plant Mechanical Systems and Facility Design.
   1. Reactor coolant system
   2. Chemical and Volume control system
   3. Auxiliary and component cooling system
   4. Waste disposal system (liquid, gaseous, solids)
   5. Steam, feedwater, condensate and drain system
   6. Turbine support system
   7. Fire protection system
   8. Ventilation systems
   9. Station and instrument air
   10. Service water and circulating water system

d. Plant Electrical System (Distribution and Control)
   1. Switchyard
   2. Main station and auxiliary buses and transformers
   3. 480 volt system
   4. Instrument buses
   5. DC buses
   6. Diesel-generators
   7. System controls, sequencers and interlocks

e. Instrumentation and Control System
   1. Nuclear instrumentation
   2. In-core nuclear and temperature monitoring
   3. Full length and part length rod control
   4. Rod position indication system
   5. Rod insertion limits
   6. Pressurizer controls
   7. Steam dump controls
   8. Steam generator level control
   9. Reactor protection system
   10. Engineered safeguards logic and protection system
   11. Logic diagrams
   12. Reheat control
   13. Generator control
   14. E-H control
   15. Plant computer and SER

f. Power Plant Kinetics
   1. Normal plant transients
   2. Accident analyses
   3. Instrument failure transients

g. Radiation Monitoring and Health Physics
   1. Types, sources, effects of radiation
   2. 10 CFR 20 and 10 CFR 100 requirements
   3. Radiation protection manual and procedures
   4. Radiation monitoring system

h. Refueling
   1. Refueling procedures
   2. Refueling equipment

i. Technical Specifications
   1. Safety limits
   2. Heatup and cooldown limits
   3. Discharge limits
   4. Environmental limitations (Appendix B)
   5. Core power distribution limits
   6. Surveillance requirements

j. Safety and Emergency System
   1. Safety injection system
   2. Containment spray system
   3. Auxiliary feedwater system
   4. Shield building vent system
   5. Auxiliary building special ventilation system
   6. Control room air conditioning and vent system
   7. Steam exclusion areas

k. Operating Procedures
   1. Normal operating procedures
   2. Abnormal operating procedures
   3. Emergency operating procedures
   4. Site emergency plan
   5. Industrial security plan

l. Administrative Controls and Procedures
   1. Administrative controls manual

m. Changes in Plant Design Over 2 Year Period
   1. Review of semi-annual operating reports
   2. Review of design changes

The Kewaunee Plant presently has a very extensive library of video tapes which will be utilized in the formal classroom lectures. Other films and tapes will be used as they either become available or are deemed necessary by the training supervisor.

4.1.2 On-Shift Training

The Kewaunee Plant Operating Schedule is based on five shifts. The main purpose of the fifth shift is to allow a systematic time frame within which intensive training can be carried forth. In addition, scheduled overtime as required will be employed to fulfill the requirements of the program.

a. Use of Procedures and walk through techniques will be employed covering:
   (1) Normal Operations
   (2) Abnormal Operations
   (3) Emergency Operations
   (4) Review and understanding of the Technical Specifications
   (5) Response to Site Emergency or Plant Security Conditions
   (6) General discussion on plant conditions, changes and system inter-relationships

4.2 Simulator Training

4.2.1 High priority will be given to a simulator for use in the requalification program. If the simulator is not used, licensed operators shall continue on-the-job training by having performed at least 10 reactivity control manipulations, startup, shutdown, etc. that demonstrate skill and familiarity of control systems.

4.2.2 If it is established that the simulator will be used, a definitive program will be prepared describing the type of training and the amount of time to be spent on the simulator.

4.3 Operator Evaluation

Each operator will be individually evaluated throughout the program to determine whether the operator requires an accelerated program in order to complete the course within the allotted time.

4.3.1 Written examinations will be given periodically and following the class work on major subjects.

4.3.2 Operational drills will be conducted periodically.

4.4 Annual Program Evaluation

The program will be so designed to allow the operators to complete all the required work within such a period of time as to allow a complete evaluation of each operator and where repeat work is necessary, it can be accomplished within the allotted time. The program will also cover refueling and the schedule will be developed to allow for shift work, holidays and vacations.

4.5 Records

Records will be maintained of each participant. These records will contain copies of the written examinations and the results. They will also contain results of evaluations of each participant; including deficiencies as well as additional training that the participant may have taken during the two year period.