TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

January 29, 1982

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US NUCLEAR REGULATORY COMMISSION
DOCKET MANAGEMENT BR
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Director of Nuclear Reactor Regulation
Attention: Ms. E. Adensam, Chief
Licensing Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Ms. Adensam:

In the Matter of the Application of	)	Docket Nos. 50-390
Tennessee Valley Authority	)	50-391

Enclosed for NRC review is information addressing open items 87, 88, 89, and 90 in the draft Watts Bar Nuclear Plant Safety Evaluation Report (SER). This information should resolve NRC concerns as specified in SER chapter 13.

If you have any questions concerning this matter, please get in touch with D. P. Ormsby at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills

L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this 29th day of January 1982
Paulette H. White
Notary Public
My Commission Expires 9-5-84

Enclosure

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ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

SER OPEN ITEMS FOR CHAPTER 13

1. Shift Staffing

In the event that the assistant shift engineer (shift supervisor) needs to leave the control room, the shift engineer or another SRO will relieve the assistant shift engineer (shift supervisor) in modes 1, 2, 3, and 4. This is addressed in the technical specifications. TVA's NUREG-0737 response will be changed to state that an assistant shift engineer can only be relieved by the shift engineer or another SRO in modes 1, 2, 3, and 4.

2. Shift Technical Advisor (STA) Qualification

TVA believes that the requirement of a degree in engineering or science along with the 32 weeks of STA training meets the NRC's 60-hour college credit recommendations. We have no plans to change these requirements at this time. The STA shall have 18 months experience in the operation, design, or licensing of nuclear power plants.

3. Independent Safety Engineering Group (ISEG)

The qualifications of an ISEG member are: must have a degree in engineering, or equivalent. At least 4-1/2 years' experience in the operation, design, or licensing of nuclear power plants. A safety problem identified by the ISEG will be first brought to the attention of the responsible plant employee. If the problem is not corrected at this level, the compliance supervisor will bring it to the attention of the plant superintendent. If the compliance supervisor is not satisfied with the resolution, the communication channel to the offsite technical support manager will be utilized to bring the problem to the attention of the central office technical support organization. The plant figure in chapter 13 has been changed to show the offsite channel of communication.

AUXILIARY UNIT OPERATOR QUALIFICATIONS FOR DOUBLE VERIFICATION AND SYSTEMS REQUIRED FOR DOUBLE VERIFICATION

Attachment 1 is an outline of the AUO training that qualifies him to perform duties in specific plant locations.

Currently, second verification is required for the systems listed below:

1. Auxiliary feedwater

2. Emergency core cooling

3. Emergency gas treatment

4. Essential raw cooling water

5. Reactor coolant system

6. Component cooling water

7. Containment spray

8. Residual heat removal

9. Emergency diesel generators

10. Upper head injection

11. Spent fuel pit cooling system

In addition, all calibrations and loop checks of the reactor protection system instrumentation require double verification signoffs before returning the instrument to service. TVA will include additional systems for double verification as we deem necessary.

ATTACHMENT 1

4.0 AUO TRAINING - INDEX

4.1 AUO Work Station Break-in and Certification

4.2 AUO annual retraining

4.3 Pre-Cold license training for AUO's

PURPOSE: This section outlines the training requirements for all assistant unit operators in addition to general employee training. Although these personnel are not required to have NRC licenses, it is essential that they are properly prepared to direct or perform activities important to the safe and efficient operation of the nuclear power plant.

4.1 BREAK IN TRAINING FOR ASSISTANT UNIT OPERATORS

As a minimum the following guidelines shall be followed by each of the five shift groups to certify the trainee to be competent to perform the work safely at each work station.

Break-In Period

All assistant unit operators presently assigned to WBNP shall be systematically placed in a break-in period of training for each work station that they are not presently qualified on.

The break-in period may vary from one day to five days depending on the complexity of the work station as indicated in Attachment A.

The Operations Supervisor shall schedule the assistant unit operators for this break-in training.

Break-In Period Training

The break-in period training for each assistant unit operator work station shall be conducted by an experienced assistant unit operator.

The training, as a minimum, shall consist of such things as:

(1) Routine duties of work station (i.e. readings and inspections).

(2) Familiarization of work area (i.e. layout of floor plan, equipment in area, fire protection, and telephones).

(3) Operation of equipment (i.e. startup, normal operation and shutdown).

(4) Type of work in area when unit is starting up or shutting down.

(5) Hazards within the work area.

(6) Cautions/Precautions relative to work area.

Break-In Examination

Following the break-in training period, an oral certification examination (see OSLA27 Attachment C) shall be given to establish that the training has been adequate to qualify the trainee to competently and safely man the work station. The examination shall be administered by a qualified operator other than the operator serving as instructor. The Shift Engineer of each group shall select the examiner from his group of qualified operators. The examination shall be documented and attested to by completing Attachment B of this section letter. If the results of the examination are unsatisfactory, the trainee will be put back into training for whatever additional period of time is required, as decided by the Shift Engineer, to qualify him for the position. This will be decided through subsequent oral examination or he will be restricted from assuming responsibility for the particular work location.

Break-In Examination (Cont.)

The completed Attachment B shall be forwarded to the Operations Supervisor's office.

Break-In Qualification List

A qualification status list will be maintained by the Operations Section Supervisor and provided to the Shift Engineer.

The qualification status list will consist of operator names and job positions for which they are qualified. The Shift Engineer will fill work positions and make job assignments in compliance with this list. Also the Operations Section Supervisor's Clerk will use this list for making out the weekly work schedule.

The qualification list will be updated periodically by the Supervisor, Operations Section, by information provided by the completed Attachment B.

Reference: OSLA-27 - Work station description, responsibilities and breakin examination

ATTACHMENT A

BREAK IN PERIOD

1.	Makeup water treatment plant unit 0	5 days
2.	Condensate demineralizer units 1 & 2	5 days
3.	Outside areas units 1 & 2	3 days
4.	Turbine building unit 1	5 days
5.	Turbine building unit 2	2 days
6.	Auxiliary building unit 1	5 days
7.	Auxiliary building unit 2	2 days
8.	Ice condenser units 1 and 2	5 days
9.	Control room unit 1	3 days
10.	Control room unit 2	2 days
11.	Radwaste units 1 & 2	5 days
12.	Auxiliary boilers unit 0	2 days (when in servic
13.	Hypochlorite system unit 0	4 days (when in servic
14.	Condensate waste evaporator units 1 & 2	2 days (when in servic
		50 days
		10 weeks

ATTACHMENT B

BREAK-IN EXAMINATION

DATE _____

WORK STATION _____ TIME ON BREAK-IN _____ (DAYS)

EXAMINEE _____ (SIGNATURE)

EXAMINER(S) _____

EXAMINATION RESULTS

_____ SATISFACTORY

_____ UNSATISFACTORY

RECOMMENDATION FOR ADDITIONAL BREAK-IN (IF UNSATISFACTORY)

_____ DAY(S)

BRIEF EXPLANATION OF EXAMINEES WEAKNESS (IF UNSATISFACTORY)

_____

_____

_____

_____

_____

RECOMMENDATION TO BE PLACED ON QUALIFICATION STATUS LIST

SHIFT ENGINEER _____ (SIGNATURE)

EXAMINER(S) _____ (SIGNATURE)

4.2 AUO Annual Retraining

Beginning with Unit 1 fuel loading, one week (40 hours) per year shall be established for each assistant unit operator to attend formal classroom training instructed by a qualified operator. The following areas shall be covered:

(a) Fire protection systems
(b) Plant electrical systems
(c) Primary systems and safety-related items
(d) Nuclear instrumentation
(e) Technical specifications
(f) Plant instructions and administrative procedures (appropriate plans and procedures)
(g) Radwaste
(h) Water quality control and its significance
(i) The AUO's job as related to unit reliability
(j) Health physics and plant security
(k) Reportable occurrences (WBNP and other facilities)

REFERENCES: N-OQAM, Part III, Section 6.1, 1.5.3
WB12.7
DPM No. N7704
WB12.4

RESPONSIBILITY: The Operations Supervisor is responsible for developing and scheduling the assistant unit operator training.

DOCUMENTATION: A training form TVA Form 1453 shall be placed in the employee field training file indicating satisfactory completion of the training.

RETRAINING: Every year

Attend: All AUO's

Conducted By: Operations Section at WBNP

4.3 Pre-Cold License Training for AUO's

Purpose: To supplement the simulator cold-license certification training.

Scope: Prior to cold license examination, the AUO's going to the POTC for RO cold license certification training should attend this training program. It consists of 2 weeks of training covering equipment and secondary systems which are primarily WBNP specific and should help the student to better relate to WBNP equipment while training on the SNP simulator.

Requirements: There are no specific requirements for attendance of this class but if time and manpower permits it should be attended.

Documentation: Attendance will be documented with a 1453 in the operator training files.

Week 1

Typical Daily Outline 1

A. Essential raw cooling water system
B. Raw cooling water system
C. High pressure fire protection system

Typical Daily Outline 2

A. High pressure fire protection system
B. CO_2 fire protection system
C. Fire detection system
D. Component cooling water system
E. Control and station service air system

Typical Daily Outline 3

A. Condenser circulating water system
B. Condensate and feedwater systems
C. Auxiliary feedwater system

Typical Daily Outline 4

A. Main steam system
B. Steam generator blowdown system
C. Steam generator automatic level control system
D. Feedwater line and steam generator anti-hammer control system

Typical Daily Outline 5

A. Feedwater line and steam generator anti-hammer control system
B. Weekly Quiz

Week 2

Typical Daily Outline 1

A. Moisture separator reheaters and control system
B. Extraction steam system
C. Heater drains and vents
D. Turbogenerator Operation

Typical Daily Outline 2

A. Turbogenerator protection
B. Review standby power system - Diesel Generator operation and control

Typical Daily Outline 3

A. Review standby power system
   1. 6.9kv shutdown boards
   2. 125v DC system
   3. 120v AC vital and non vital instrument power
   4. 250v DC system

Typical Daily Outline 4

A. Fuel Handling

Typical Daily Outline 5

A. Fuel Handling
B. Fuel Handling tech. specs.
C. Weekly Quiz