

# MONITORING AUDIT REPORT

SUBJECT: Licensed Operator Training, Qualification and Requalification

REPORT NO.: MAR 83/0161, Unit I

AUDIT DATES: December 6-19, 1983

ORG/ACT.: Training Section

AUDIT SCOPE: Verification of training, qualification and requalification of licensed operator candidates to FSAR 13.2, 18.1, and Q&R requirements; and the review of license applications submitted to the NRC for correctness to selected course descriptions, nuclear navy training, etc. in the individuals training records.

SUMMARY: This audit was conducted to verify that the information submitted on Senior Reactor Operator (SRO) and Reactor Operator (RO) license applications is in compliance with FSAR SRO and RO training commitments as described in individual training records. The overall audit results indicate that training and qualification of licensed operators is being accomplished without sufficient attention to detail regarding supportive documentation of individual training. Those areas are discussed in the Findings Section. During the audit, 14 RO and 21 SRO applicants training files were reviewed. The files reviewed were as follows:

## RO (Applicants)

1. Paul Wade Brewer
2. Billy Ray Cupit
3. Michael Alan Dorsett
4. Karl Frederick Ehrhardt
5. Mickey Joe Ellis
6. Samuel Ferguson Franco
7. John Burk Frazier
8. Errol Keith Hall
9. Terry Hubert Holcombe
10. Stephen Wayne Humpries
11. Billy George Lewis
12. Thomas Oliver McIntyre
13. Hughie Enoch McKnight, Jr.
14. James Lamar White

## SRO (Applicants)

1. Charles Andrew Bottemiller
2. Steve A. Burris
3. Walter Charles Cade, Jr.
4. Charles Edgar Cresap III
5. Charles William Ellsesser
6. William Keith Gordon, Jr.
7. Charles Vincent Hicks, Jr.
8. Ronald Keith Jacobson
9. Roy Green Keeton
10. George Howard Lee
11. Gary Duane Lhamon
12. James Kelly McDonald
13. Michael Dennis McDowell
14. George Lewis McMillan, Jr.
15. John Forrest Manby
16. Larry Bevan Moulder
17. James Lee Robertson
18. Wayne Allison Russell
19. William Michael Shelly
20. Clark Daniel Stafford
21. Kenneth Lee Walker

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REBER85-419 PDR

The portions of the applications documenting training received by the above listed personnel were used for this audit. Application entries were compared critically against individual training records. Criteria used to verify completion of training was as follows (one or more of the criteria was required before satisfactory completion was credited):

1. Records of course attendance and passing of final exam
2. Satisfactory completion of challenge exam
3. Satisfactory completion of make-up exam
4. Certification of satisfactory completion of training
5. Documented previous experience or training

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## SUMMARY: (con't)

As a side issue, the OTEC board was provided a listing of all applicants/courses for which a grade of less than 80% was obtained to aid in their determination of weak areas.

FINDINGS: The following areas were found to be satisfactory during the course of this audit:

- Entries made in the last two months on Individual Training History records have fewer errors and are generally neater than those prior to that time.
- The majority of training records for each license applicant are readily retrievable and clear as to documentation.

The following areas were found to be unsatisfactory during the course of this audit:

- Documentation for some FSAR Section 13.2 commitments for licensed operators is not available or is insufficiently documented for: FSAR 13.2.1.1.2 "Nuclear Fundamental Training". See CAR 2053; FSAR 13.2.1.1.3 "Systems Operations Training". See CAR 2042. (previously issued)
- Credit by Previous Experience is not being appropriately applied to license candidates in two cases of a degree not meeting FSAR 13.2.1.1.12 "...in the fields of nuclear engineering or nuclear sciences." Adequate documentation to support the previous experience is not always available specifically in eleven cases for nuclear navy experience. See CAR 2053
- Documentation is inadequate to verify compliance with FSAR 18.1.4 (which addresses applications after initial criticality and which states in part "SRO applicants shall have held an NRC Operator License for a period of one year"). See CAR 2053
- Documentation is inadequate to assure FSAR 13.2.1.1.16 "Diesel Engine Training" commitments are being met for 3 RO's and 10 SRO's. See CAR 2053
- Observation training as listed in FSAR Q&R 441.4 (13.2.2) was not clearly documented for any of our RO/SRO applicants. See CAR 2042 (FSAR 13.2.1.1.5.3)
- Documentation on some requalification examinations was conflicting on the writer and grader of examinations used to verify conformance to FSAR 13.2.2.2.1 (2nd Sentence).
- QA was unable to verify conformance to AECM-82/0179 dated 4/21/82 for requalification examinations Section 6 and 3 taken by one SRO applicant and two RO applicants. The NRC administered and graded the three applicant's examinations, one Section 6 and two Section 3, but has not provided appropriate information to MP&L.



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FINDINGS: (con't)

- No documentation was available to assure compliance with FSAR 13.2.2.1.2, which requires each licensed operator, during his term of license to perform annual control manipulations. Documentation was unavailable for eleven SRO's on 1982 annual control manipulations..

## PERSONS CONTACTED:

<u>NAME</u>	<u>TITLE</u>	<u>PRE-AUDIT CONFERENCE</u>	<u>DURING</u>	<u>POST-AUDIT CONFERENCE</u>
D. L. Hunt	Training Supt.	X	X	X
J. W. Yelverton	Assistant Plant Mgr.			X
R. C. Fron	Principal Civil-NPE		X	
W. C. Cade	RO		X	
S. M. Feith	Nuclear Site QA Manager			X

The Post-Audit Conference was held on 12/19/83 in the Training Building and all Audit Team Members attended.

CRITERIA: 10CFR55, "Operator's Licenses Final Safety Analysis Report Sections:

13.2.1.1.1 paragraphs 3.a & 3.d  
 13.2.1.1.2  
 13.2.1.1.3  
 13.2.1.1.4 paragraph 1, sentences 1 and 2  
 13.2.1.1.5.3.b  
 13.2.1.1.8 paragraph 3, sentence 1  
 13.2.1.1.12 options 1,3,4 & 5  
 13.2.2 paragraphs 1,2,3,5; statements 1 through 5, 6  
 13.2.2.1.2 paragraphs 1.a through f, 3  
 13.2.2.1.3  
 13.2.2.2.1  
 13.2.2.2.2  
 13.2.2.2.2.5  
 13.2.2.4  
 13.2.5 paragraphs 1 and 2  
 13.2.6  
 18.1.4  
 18.1.5  
 18.1.6  
 Q & R 441.4 and 441.5

Enclosure 4 to H. Denton's Letter of 3/28/80

MAEC 82/0142

MAEC 80/0076

AECM 82/0179

CHECKLIST USED: MAR 83/0161-1, 2

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AUDIT TEAM MEMBERS:

William C. Eiff  
W. C. Eiff

12/19/83  
Date

C. W. Heard  
C. W. Heard

12/19/83  
Date

L. C. Burgess  
L. C. Burgess

12/19/83  
Date

S. L. Gates  
S. L. Gates - Observer

12/19/83  
Date

AUDIT TEAM LEADER:

W. E. Edge  
W. E. Edge

12/19/83  
Date

NUCLEAR SITE QA MANAGER:

Steve Feith  
S. M. Feith

12-19-83  
Date

A38

MEMO TO: Mr. D. L. Hunt, Training Superintendent  
FROM: S. M. Feith, Nuclear Site QA Manager  
SUBJECT: Recommendations resulting from MAR-83/0161  
FILE: 0290/16694.4  
PMI- 83/13649

*WHERE IS  
DISCUSSION  
OF FINDING #7*

The following recommendations are made from observations made during MAR-83/0161:

1. FSAR 13.2.2.2.2 requires that operators scoring less than 80% on retraining program written exams be rescheduled for the next lecture on that subject. GGNS training department currently reschedules all operators for the training the next year, without any effort to retrain the operator who has scored less than 80% prior to this time. It is recommended that operators making less than 80% be rescheduled prior to the next year.
2. It is recommended that GGNS Requalification Exams be formatted as shown in FSAR 13.2.2.2.5, "Requalification Exam's Formats".
3. Plant Administrative Procedures should address qualification requirements for graders of operator exams. These qualifications should be documented.

Your response to these is requested by February 15, 1984.

*Steve Feith*  
S. M. Feith  
12/21/83

LCB:ks

cc: Mr. J. B. Richard  
Mr. J. P. McGaughey, Jr.  
Mr. T. E. Reaves, Jr.  
Mr. L. F. Dale  
Mr. J. E. Cross  
Mr. T. H. Cloninger  
Mr. J. F. Pinto  
Mr. C. C. Hayes  
Mr. W. E. Edge  
Mr. J. E. Reaves  
Site QA File ✓  
Manual File  
Plant File, GGNS  
Project File (1)

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MEMO TO: Mr. J. P. C. , Nuclear Plant Manager

FROM: S. M. Feith, Nuclear Site QA Manager

SUBJECT: MAR 83/0161, Training, Qualification and Requalification of Licensed Operators with Attached CAR 2053

FILE: 0290/0490/15810/16694.4

MAR: 83/0161

Attached is the final report of an audit conducted to examine the training, qualification and requalification of licensed operator candidates.

Several nonconformances were identified regarding the amount of training several licensed operators received vs. the amount documented in the individual's training files. Documentation to verify compliance with certain FSAR Section 13.2, 18.1, and Question and Response commitments was not available. Corrective Action Request (CAR) 2053 is being issued to track these nonconformances.

Please respond to this CAR in conjunction with the date of completion of the OTEC board for the current recertification process (February 15, 1984). Your response should include determination of cause, remedial action taken, and measures taken to preclude recurrence.

If you have any questions in regard to this audit report, please contact Bill Eiff at extension 3201 or Wenstrom Edge at 969-2463.

We appreciate the cooperation we received during the course of the audit.

*Steve Feith*  
S. M. Feith  
12/21/83

WEE:MCE:SMF:ks

Attachment: A-Audit Report  
B-Corrective Action Request  
C-Completed Checklist (not to addressee)  
D-CAR Status Form (not to addressee)

cc: Mr. J. B. Richard w/A & B  
Mr. J. P. McGaughey, Jr. w/A & B  
Mr. T. E. Reaves, Jr. w/A & B  
Mr. J. F. Pinto w/A & B  
Mr. T. H. Cloninger w/A & B  
Mr. L. F. Daughtery w/A & B  
Mr. C. C. Hayes w/A & B  
Mr. J. E. Reaves w/A & B  
Mr. D. L. Hunt w/A & B  
Mr. J. W. Yelverton w/A & B  
Mr. C. K. McCoy w/A & B  
Mr. P. Hughes w/A & B  
Site QA File w/A, B, C & D ✓  
Manual File w/A, B, C & D  
CAR File w/A, B, C & D  
LOTS File w/A, B, C & D  
Plant File, GGMS w/A, B, C & D  
Project File w/A, B, C & D (42)

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# MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P.O. BOX 1640, JACKSON, MISSISSIPPI 39205

September 30, 1983

JAMES P. MCGAUGHY, JR.  
VICE PRESIDENT

U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30303

Attention: Mr. Bruce Wilson

Dear Mr. Wilson:

SUBJECT: Grand Gulf Nuclear Station  
Units 1 and 2  
Docket Nos. 50-416 and 50-417  
License No. NPF-13  
Reference: AECM-81/002  
File: 0765/0260/0272/0092  
Applications for Operator's and  
Senior Operator's Licenses  
AECM-83/0629

In the license application letter to Mr. Paul Collins, subject title Application for Operator's and Senior Operator's Licenses, AECM-81/002 dated September 3, 1981, errors were made in the enclosed applications for some of the license candidates. These errors were discovered by MP&L's training staff upon review of the applications, after which time the training staff initiated a Plant Quality Deficiency Report (PQDR, 7-83) to track the matter to resolution. The PQDR was brought to the attention of NRC representatives during a special training assessment conducted by Mr. D. R. Quick and his team on February 15-17, 1983, and was carried as an unresolved item in the NRC's report (50-416/83-06 and 50-417/83-03). The unresolved item was later discussed with the NRC's Mr. C. A. Julian, while the NRC's operational readiness review was in progress.

The errors, which were the subject of the PQDR, were that some of the personnel listed in Enclosure 1 to the referenced letter did not complete a Cold License Operator Qualification Card, although it was indicated that they had completed the qualification card in their license applications, Item 7 of Enclosure 2 to the same letter. MP&L has reviewed in detail the circumstances which resulted in these errors, and has determined that it is neither necessary nor practical to require the operators, who had not completed a qualification card, to do so at this time. This determination is based on the fact that these people have successfully completed the initial training program, have received their licenses, have successfully completed the yearly requalification program, and have gained operational experience at the plant since 1981.

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The training staff has initiated permanent corrective action to prevent similar occurrences in the future. A new training instruction, Licensed Operator Training Program Implementation, 14-S-02-6, has been issued. This procedure specifies the method to be used by each license candidate to complete the qualification card. In addition, it also specifies the required completion period. The instruction also promulgates a new checksheet for the training staff's use. This checksheet includes a line item that will provide documentation that the qualification cards and the required training were completed and requires an entry to be made in the appropriate training record after the training has been completed.

Furthermore, during its investigation of the errors, which were the subject of the PQDR, MP&L determined that other errors had been made in the list of formal training, Item 7 of the Application, Enclosure 2 to AECM-81/002, for certain of the applicants. These additional errors were that the license applications for some of the applicants indicated that a specific training course had been successfully completed by the applicant, when in fact, the course had not been completed, but it appears that in each case the subject matter of the course had been successfully covered by other training received by the applicant. MP&L is continuing its detailed review of each application, which has been submitted to the NRC, and of the supporting training records to verify the accuracy of each submittal. MP&L will submit to your office a complete verification of each applicant's records, identifying and resolving each discrepancy by October 21, 1983.

The training staff has initiated permanent corrective action to prevent similar occurrences. Procedure 14-S-02-6 has been issued and provides a checklist to include line items verifying that required training for license applicants has been completed and requires appropriate entries to be made in the training records after training courses have been completed.

The discrepancies discussed above have been reviewed by the Plant Staff and it has been determined that these items have no impact on the safe operation of Grand Gulf Nuclear Station. This letter is being provided in order to notify you of discrepancies between what was originally submitted in the license applications and what is actually documented in the individual training records.

MP&L appreciates the importance of this matter and since the time when the errors in the Applications were first discovered, it has given additional management direction to the preparation of Operator and Senior Operator License Applications and has established procedures to ensure that these types of errors do not occur in the future.

Sincerely,

*James M. Hughes, Jr. / Anne L. Loefer*

JPM:lm

cc: (See Next Page)

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## MISSISSIPPI POWER &amp; LIGHT COMPANY

cc: Mr. J. B. Richard  
Mr. R. B. McGehee  
Mr. T. B. Conner  
Mr. G. B. Taylor

Mr. Richard C. DeYoung, Director  
Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. J. P. O'Reilly, Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30303

Mr. Donald Beckham  
Operator License Branch  
Division of Reactor Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

OCT 18 1983

MEMORANDUM FOR: James Y. Vorse, Director, Office of Investigation,  
Atlanta Field Office

FROM: James P. O'Reilly, Regional Administrator

SUBJECT: REQUEST FOR INVESTIGATIVE ASSISTANCE  
GRAND GULF NUCLEAR POWER PLANT (CASE NO. RII-83-A0085)

During our Operational Readiness Team inspection (83-38) at Grand Gulf, it was determined that incorrect information was provided to the NRC in a letter from Mississippi Power and Light Company (MP&L) dated September 3, 1981, which requested the NRC to administer the first group of reactor operator license exams. This matter of incorrect information being provided to NRC was originally documented as an unresolved item, 50-416/83-06-01, during an earlier Training Assessment inspection when it was stated by the licensee to be a record keeping deficiency. Report 83-38 documents the fact that not all required training of the operator candidates was actually conducted as stated in the MP&L application letter and records noted items as unresolved item 83-38-11 pending further review by regional management. You and L. Williamson, at my request, attended the Management Meeting held in the Region II offices on October 12, 1983, with representatives of MP&L management to discuss the current status of this problem as known by MP&L. You are, therefore, aware of the general circumstances of this matter.

This matter is being pursued for possible Escalated Enforcement Action and will be resolved following further inspection efforts and our review of your investigative findings as discussed in the following paragraphs.

In order to enable Region II to better evaluate the regulatory significance of the above situation, we request that you conduct an investigation of this matter--a matter that involves the submittal of false information to the NRC on a subject that could be material to the granting of licenses to operators. You are requested to examine the following areas during your investigation:

- A. A review of verbal information provided by MP&L at our meeting of October 12, 1983, is highlighted as follows:
1. Incorrect information was included in Operator License applications as the result of poor administration and inadequate review of the status and completion of operator training.
  2. Qualification cards were not completed for two reasons:
    - a. The practical factors portion of the cards were not done because the associated procedures had not been written or the notation "later" was not noticed on the cards during MP&L's review.

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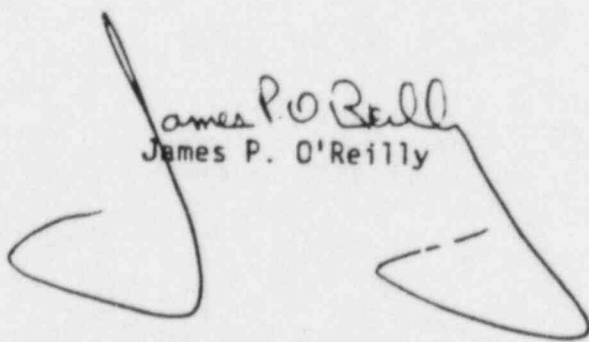
OCT 18 1983

- b. Complete qualification cards were not regarded as being necessary for the adequate preparation of license candidates. This attitude was held by the, then, Operations Superintendent and Training Superintendent. Neither of these individuals is currently employed by MP&L.
  3. Several courses indicated by the license application as having been attended by applicants did not have documented attendance records, in all cases, in the plant files. It appears that a majority of the applicants did attend the training courses; however, the licensee states that the associated records have been lost or were misplaced at various times.
  4. The training supervisors who were involved in the above described situation are no longer employed by MP&L and a new training organization, including managers and consultants, is now in place.
- B. Review any information that could relate to the willful submittal of incorrect information or other causes of incorrect submittals. It is to be noted that in this case we have "two" types of NRC licensees - a utility and individuals (Licensed Operators).

We will, during the course of the investigation, provide any technical assistance that you may need at your request. If new information of significance is developed through your investigation, please inform me immediately because of pending licensing actions by the Commission.

In view of the way this case developed, we are also proceeding to verify the adequacy of the licensee's corrective actions in progress. This action will be concurrent with your investigation.

If you have any questions concerning this request, please contact me or Gregory A. Todd at extension 4193.

  
James P. O'Reilly

cc: R. C. Lewis  
C. A. Julian ✓

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PLCP REF.	COMMITMENT	METHOD OF VERIFICATION	FINDINGS/ COMMENTS	CLASSIFY. CODE
	<p>10CFR55 OPERATORS LICENSES</p> <p>" § 55.10 Contents of applications.</p> <p>➤ (a) As provided in § 55.5, each application for a license must be filed with the Director of Nuclear Reactor Regulation, the Director of Nuclear Material Safety and Safeguards, or a designated Regional Administrator, as appropriate. The application must be submitted in triplicate, except for the report of medical examination, and must contain the following information:</p> <p>(1) The full name, citizenship, age, address, and present employment of the applicant;</p> <p>(2) The education and pertinent experience of the applicant, including detailed information on the extent and nature of responsibility;</p> <p>(3) Serial numbers of any operator and senior operator license issued by the Commission to the applicant and the expiration date of each;</p> <p>(4) The specific facility for which the applicant seeks an operator or senior operator license;</p> <p>(5) The written request of an authorized representative of the facility licensee that the operating test be administered to the applicant of the facility.</p>	<p>Verified by review of license applications versus data obtained in training records.</p> <p>Reviewed records and applications for 14 RO's and 26 SRO's</p> <p>See Attachment A for SRO's</p> <p>Attachment S for RO's</p>	<p>Details of findings are contained in notations in individual sheets in Attachments A &amp; B. Several additional nonconformances were noted and documented in AECM 8/3/687. In addition, minor discrepancies in signatures were noted and corrected immediately.</p>	<p>C/N/A</p>

Classification Code:

C-Conformance

N-Nonconformance

NC-Nonconformance Corrected during audit

ND-Nonconformance Documented by audited organization

NPD-Nonconformance Previously Documented by audited organization

V-Verified Corrective Actions

A-Not Audited (More than one classification may be used.)

PERSONS CONTACTED:

D. L. Hunt

COMPLETED BY:

W. M. [Signature]

Date: 10/2/81

Checklist Number:

MAR 83/0133-1

Page 1 of 1

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SAP REF.	CONFORMANCE	METHOD OF VERIFICATION	FINDINGS/ COMMENTS	CLASSIFICATION CODE
	<p>(6) Evidence that the applicant has learned to operate the controls in a competent and safe manner and has need for an operator or a senior operator license in the performance of his duties. The Commission may accept as proof of this a certification of an authorized representative of the facility licensee where the applicant's services will be utilized. This certification must include details on courses of instruction administered by the facility licensee, number of course hours, number of hours of training and nature of training received at the facility, and for reactors, the startup and shutdown experience received.</p> <p>(7) A report of a medical examination by a licensed medical practitioner, in one copy in the form prescribed in § 55.60.</p>			

Classification Code:

- C-Conformance
- N-Nonconformance
- NC-Nonconformance Corrected During audit
- ND-Nonconformance Documented by audited organization
- NPD-Nonconformance Previously Documented by audited organization
- V-Verified Corrective Actions
- A-Not Audited (More than one classification may be used.)

PERSONS CONTACTED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COMPLETED BY:

(1) [Signature] 6/6/11

Date: 6/2/11

Checklist Number: 41103/1131

## GRAND GULF NUCLEAR STATION

INSPECTION PLAN  
10/31 - 11/04/83

### PURPOSE

The purpose of the team inspection is to take an in-depth look at Mississippi Power and Light Company's (MP&L) Training Program organization, capabilities and effectiveness. This effort will not compromise or duplicate any efforts of the Office of Investigation and will concentrate on a review of MP&L training programs presently in effect and the present capabilities and knowledge of licensed operators.

### OBJECTIVE

At the conclusion of the inspection the following information should be determined:

1. Confirm that licensed operators are presently qualified to operate the plant competently and safely.
2. Confirm the adequacy of MP&L's program to correct training deficiencies.
3. Confirm that there is an effective training and requalification program.
4. Provide recommendations on additional actions which may be necessary to resolve issues in the training area.

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SPECIFIC AREAS TO BE REVIEWED

- |                        |     |   |
|------------------------|-----|---|
| B. Wilson              | 1.  | Training Organization   |
| B. Hehl<br>J. Munro    | 2.  | Use and Effectiveness of Qualification Cards  |
| B. Wilson              | 3.  | Means to Evaluate Trainees Successful Completion of Required Courses of Instruction                             |
| B. Hehl<br>J. Munro    | 4.  | Extent of Knowledge of Individuals in Courses   |
| B. Wilson<br>C. Julian | 5.  | Extent of Involvement of Contractors and Effectiveness of Utilization   |
| L. Watson              | 6.  | Improvements Made As a Result of the February 1983 NRC Training Assessment                                      |
| L. Watson              | 7.  | Selected Records Review of Course Exams, Certification Exams, MP&L Licensing Board Results and FSAR Commitments |
| L. Watson              | 8.  | Results of MP&L QA Audit of Current Retraining  |
| J. Munro<br>B. Hehl    | 9.  | Review of Training on Plant Modifications   |
| B. Wilson              | 10. | Review of Licensed Operator Training Program and Requalification Training Program Structure and Effectiveness   |

MISSISSIPPI POWER AND LIGHT COMPANY

GRAND GULF NUCLEAR STATION

CORRECTIVE ACTION PLANS

FOR

OPERATOR TRAINING PROGRAM

NOVEMBER 1983

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## AGENDA

- o TRAINING ORGANIZATION  
J. YELVERTON
- o ORGANIZATION MODIFICATIONS FOR RECERTIFICATION  
J. McGUAGHY
- o RECERTIFICATION PROGRAM  
J. CROSS
- o HAND OUT PROGRAM
- o QUESTIONS
- o SUMMARY  
J. RICHARD



- o SRO FOR OPERATION TRAINING SUPERVISOR
- o OPERATIONS ASSISTANT FOR TRAINING
- o PROJECT MANAGER ASSIGNED
- o TRAINING SUPPORT SUPERVISOR
- o CONSOLIDATE LOCATION OF OPERATIONS TRAINING
- o IN-PLANT OPERATIONS TRAINING CENTER
- o STA'S AND SHIFT ADVISORS TRAIN WITH SHIFT
- o CLEAR UP RESPONSIBILITIES OF TRAINING AND OPERATIONS DEPARTMENTS
- o THIRD ASSISTANT PLANT MANAGER
- o CORPORATE NUCLEAR HUMAN RESOURCE MANAGER

- o CORRECTIVE ACTIONS PRESENTED
- o INCLUDE BOTH SHORT-TERM AND LONG-TERM MEASURES
- o BROADER THAN RECERTIFICATION ALONE
- o RESOURCES COMMITTED TO MAKE IT HAPPEN
- o OUR PEOPLE ARE COMMITTED TO MAKE IT HAPPEN
- o MY PERSONAL COMMITMENT TO SUCCESS

ORGANIZATION FOR RECERTIFICATION PROGRAM

J. P. McGAUGHY, JR.  
VP, NUCLEAR PRODUCTION

J. E. CROSS  
R. C. FRON

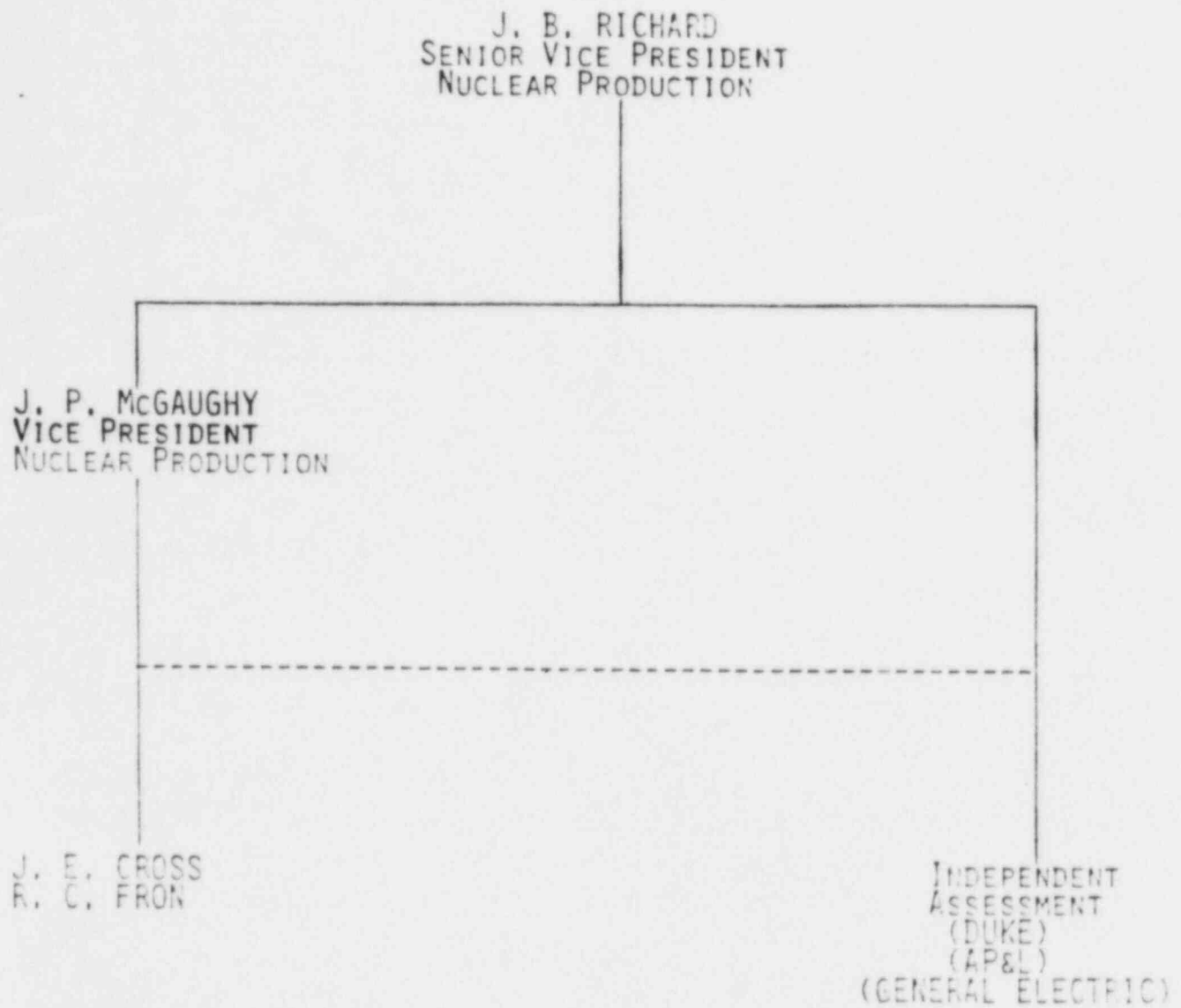
SHIFT COORDINATORS  
(TRAINING)

EXAMINERS

SIMULATOR  
(PRACTICAL FACTORS)

INSTRUCTIONS  
(TRAINING)

ORGANIZATION FOR RECERTIFICATION PROGRAM



- o WEEKLY PROGRESS MEETINGS
- o PROGRESS MEETING WITH MP&L PRESIDENT
- o VP - NUCLEAR ONSITE
- o QA AUDIT
- o SRC REVIEW



## PIPE LINE

- o SUFFICIENT PERSONNEL IN PIPE LINE TO SUPPORT THE FOLLOWING ANTICIPATED NRC EXAM SCHEDULE

<u>EXPECTED NRC EXAM DATE</u>	<u>NO. OF SROs</u>	<u>NO. OF ROs</u>
12/83	1 + 9*	7
2/84	1	
7/84	6 + 9*	8
12/84	8	8
1985	16	16
1986	16	16

\*INSTRUCTOR CERTIFICATION

- o ALLOWING FOR ATTRITION, FAILURES AND PROMOTIONS, THE ABOVE EXAMS SHOULD RESULT IN THE FOLLOWING LICENSE STATUS.

<u>YEAR</u>	<u>SRO</u>	<u>PO</u>	<u>TOTAL</u>
1983	16*	16*	32
1984	18	22	40
1985	24	15	39
1986	29	15	44

\*PENDING OUTCOME OF TRAINING RECORDS REVIEW

ASSISTANT PLANT MANAGER  
SUPPORT  
J. W. Yelverton

TRAINING SUP1.  
D. L. Hunt

Training Support  
Supervisor  
Vacant

Security  
Training Supervisor  
A. Grace

2 Consultants

Operations Training  
Supervisor  
G. Lhamon

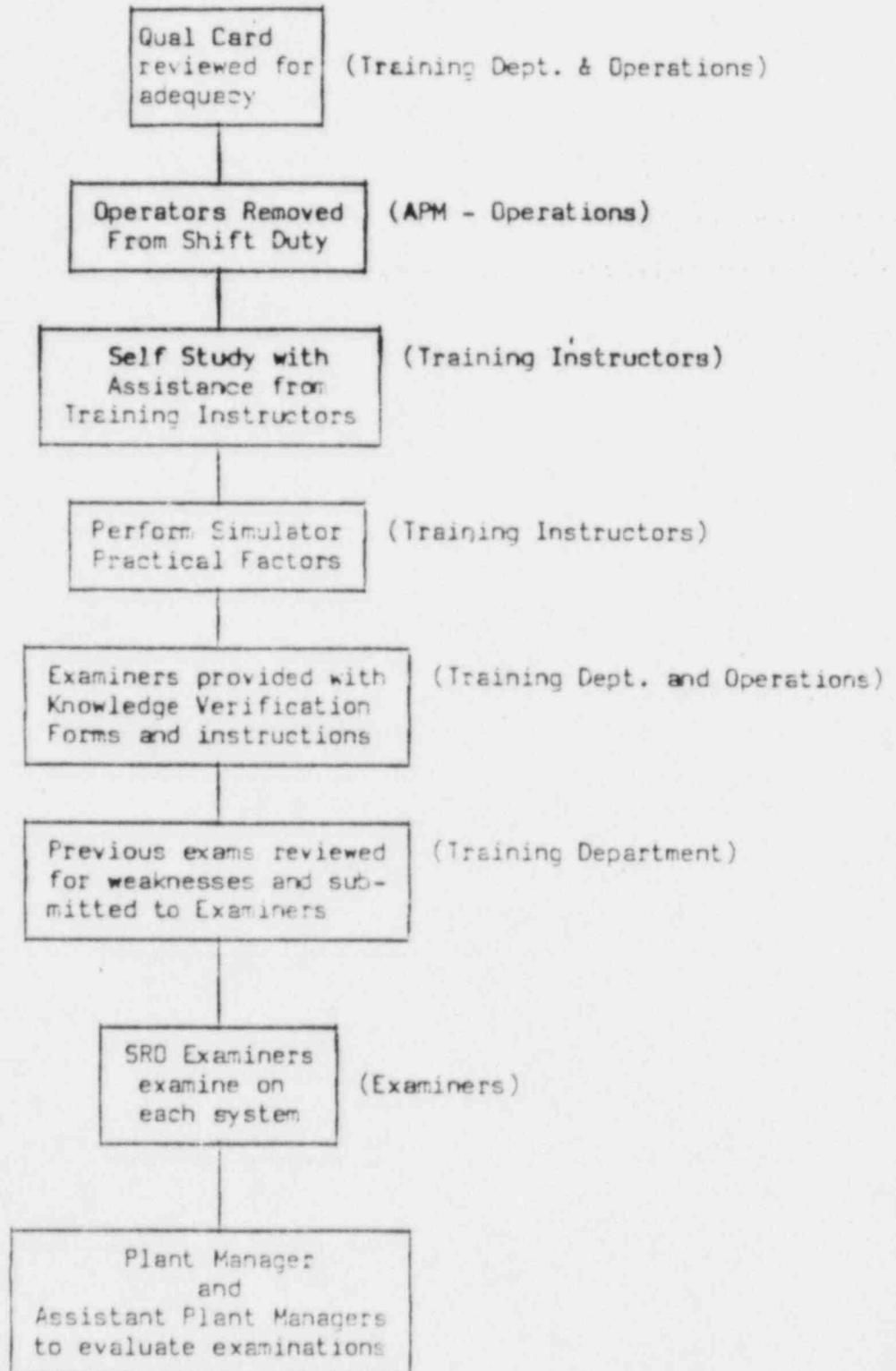
Operations  
Instructors  
MP&L  
17 Consultants

Nuclear Instructor  
Supervisor  
J. Jones

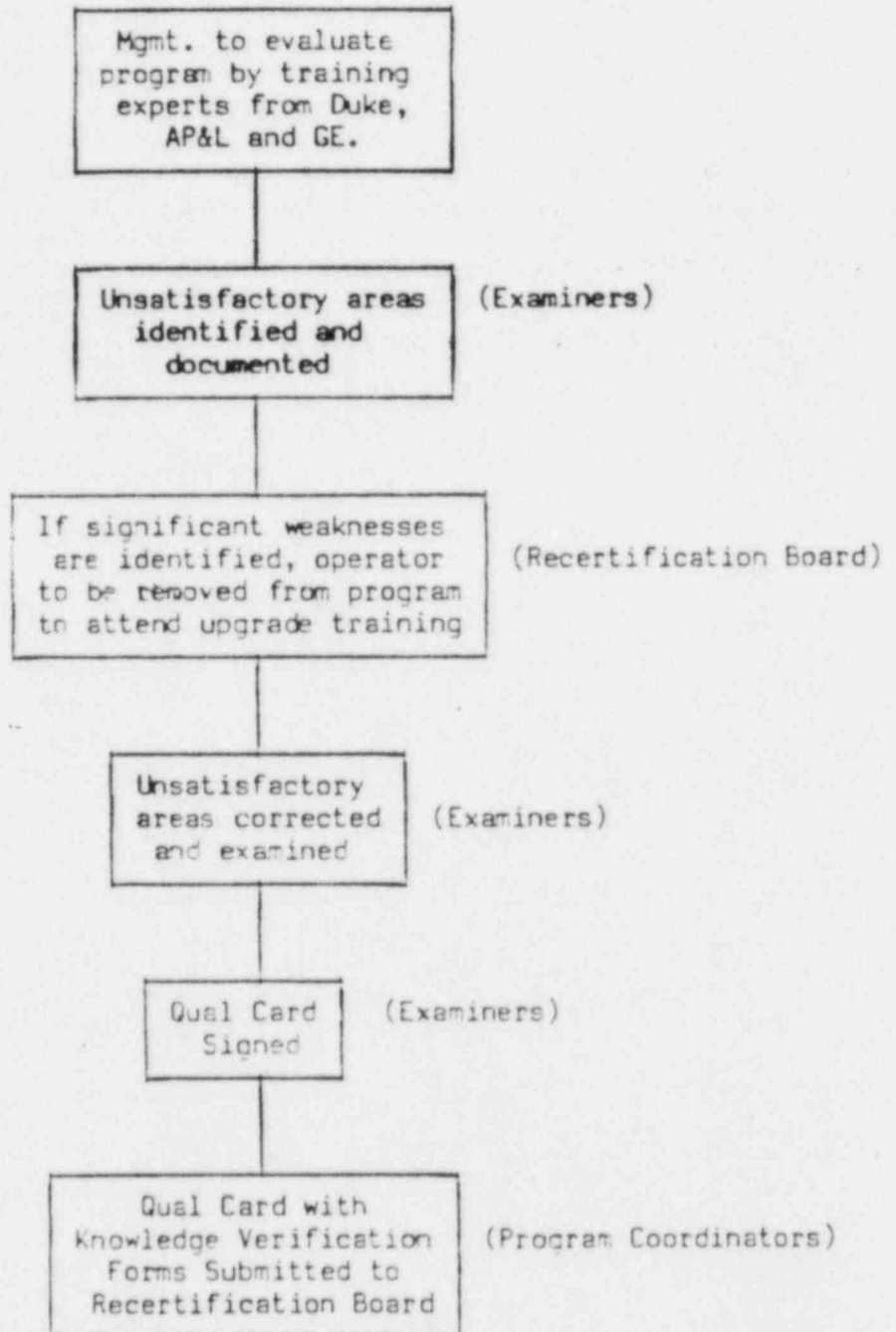
5 MP&L  
1 Consultant

Simulator  
Supervisor  
M. Shelly

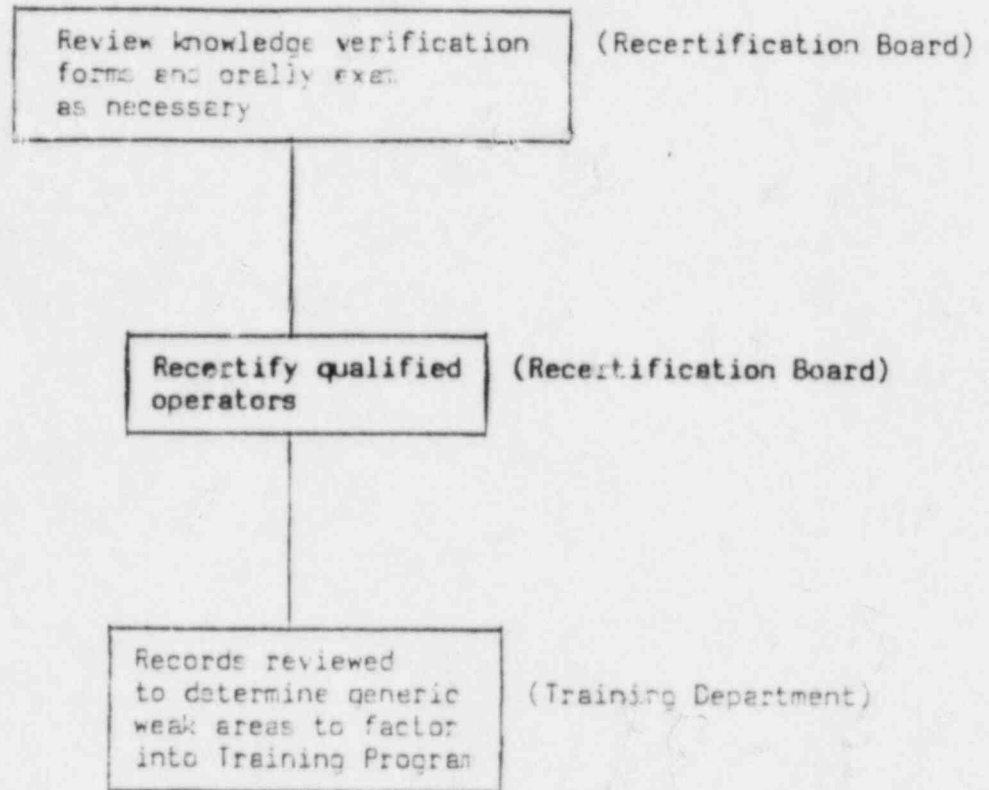
# NRC LICENSED OPERATORS



NRC LICENSED OPERATORS (Cont'd)



NRC LICENSED OPERATORS (Cont'd)



# MANAGEMENT EVALUATION

Management Reviewer \_\_\_\_\_

Date \_\_\_\_\_

Examiner \_\_\_\_\_

Examinee \_\_\_\_\_

System Examined \_\_\_\_\_

Exam Evaluation:

Satisfactory ☐

Unsatisfactory ☐

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Signature)

cc: Bob Fron

Attach copy to Knowledge Verification Form



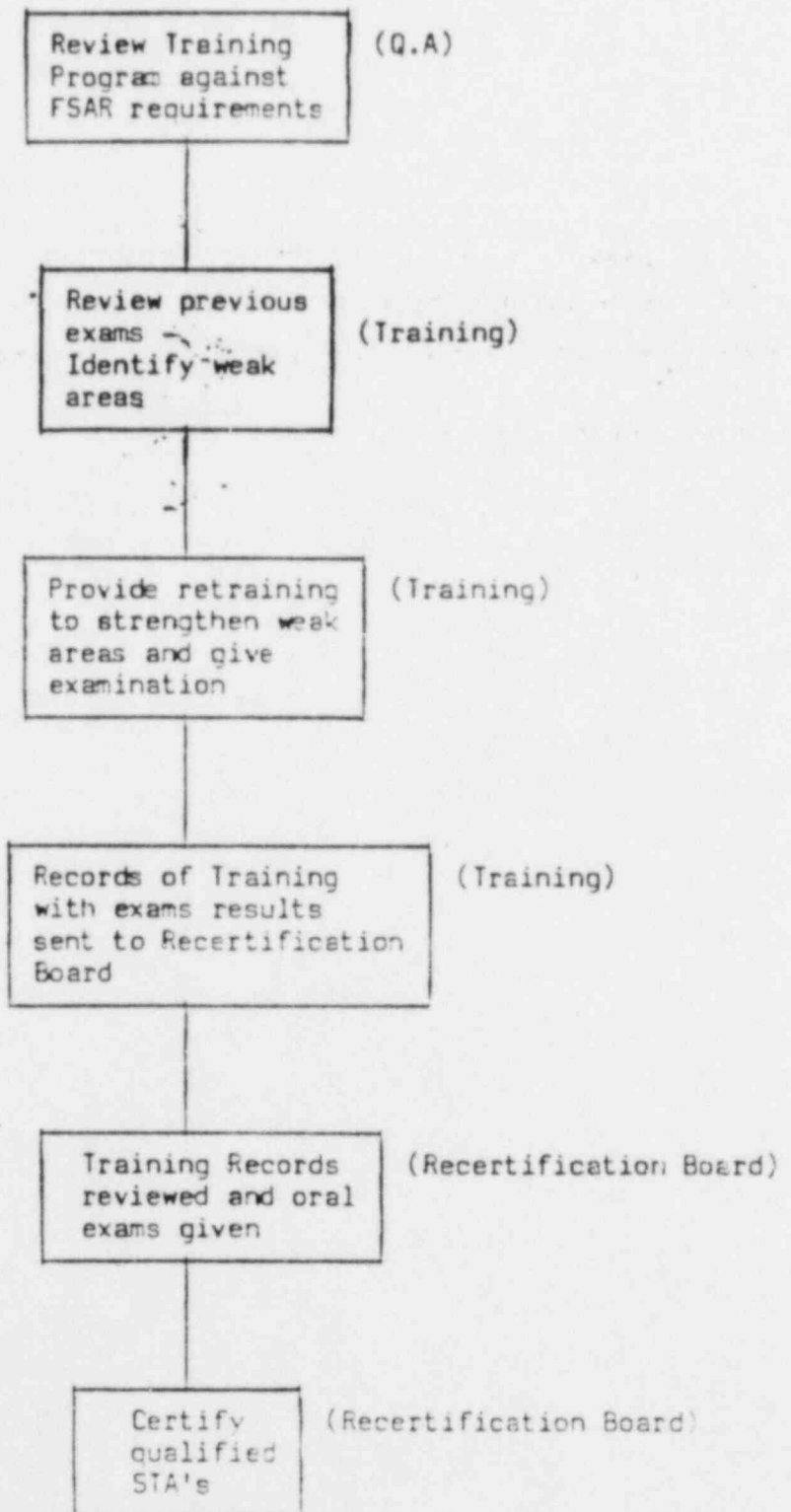
Candidate Name: \_\_\_\_\_ Pass/Fail: \_\_\_\_\_

Examiner Name: \_\_\_\_\_ Date: \_\_\_\_\_

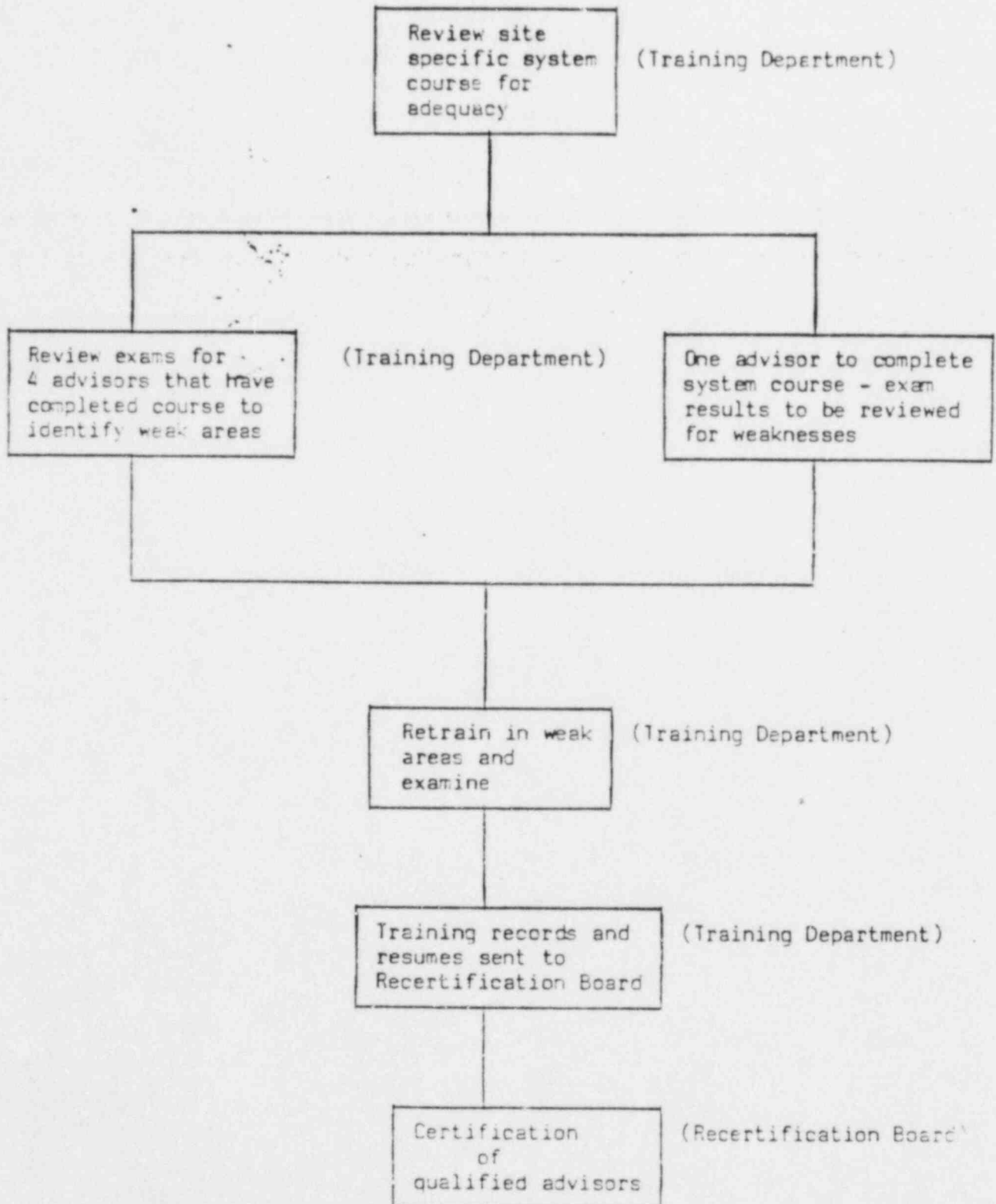
SYSTEM NAME AND NO. \_\_\_\_\_

	<u>S or U</u>	Comments for Unsatisfactory
1.0 EQUIPMENT		
1.1 Purpose	_____	
1.2 Flow Path	_____	
1.3 Normal Parameters	_____	
1.4 Components	_____	
1.5 System Behavior and Response	_____	
2.0 INSTRUMENTATION		
2.1 Detector	_____	
2.2 Malfunction	_____	
2.3 Control Room Indication	_____	
2.4 Local Indication	_____	
3.0 PLANT PROTECTION		
3.1 Alarms/Setpoints	_____	
3.2 Safety System Input	_____	
3.3 Interlocks	_____	
4.0 PROCEDURES		
4.1 Normal	_____	
4.2 Abnormal	_____	
4.3 Emergency	_____	
4.4 Surveillance	_____	
5.0 (A) REACTIVITY EFFECTS	_____	
(B) THERMODYNAMICS ANALYSIS (include Heat Transfer and Fluid Flow)	_____	
6.0 ADMINISTRATIVE REQUIREMENTS		
6.1 Technical Specifications	_____	
6.2 Facility Requirements	_____	
7.0 RADIATION PROTECTION	_____	

SHIFT TECHNICAL ADVISORS



# SHIFT ADVISORS





# MISSISSIPPI POWER & LIGHT COMPANY

*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

November 1, 1983

JAMES P. MCGAUGHY, JR.  
VICE PRESIDENT

U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly, Regional Administrator

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-13  
File 0765/0260/0272/0092  
Applications for Operators' and  
Senior Operators' Licenses  
AECM-83/0681

Mississippi Power & Light Company (MP&L) advised members of your staff during a special training assessment conducted on February 15-17, 1983, of discrepancies discovered in previously submitted applications for some of the operator license candidates. On September 30, 1983, MP&L submitted AECM-83/0629 providing additional information on these discrepancies and corrective actions taken or in progress. This subject was also discussed in a meeting with you on October 12, 1983. This letter provides further detailed information as a followup to our September 30, 1983 letter and our actions to resolve this matter.

MP&L performed a complete review of training records for all currently licensed reactor operators and senior reactor operators at the Grand Gulf Nuclear Station. Discrepancies were identified between license applications and training records. Enclosed is our discussion of each discrepancy and the corrective action taken.

These discrepancies can be categorized into three general areas:

- 1) Consistency of training duration (length of course) with that stated on the license application,
- 2) Existence of documentation to substantiate certain training listed on the license application, or
- 3) Completion of qualification cards.

A majority of the discrepancies identified in this letter is the result of training record errors that occurred prior to 1982. There has been a significant improvement in the maintenance of training records since that time. The new NRC license application form has helped us to eliminate application errors.

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8508080058 Member Middle South Utilities System  
18 pp.

In addition, MP&L's Operational Enhancement Program (MP&L letter to NRC, AECM-83/0177, dated March 11, 1983) addresses our plans to improve the Qualification Card Program. These actions include performing a review of the effectiveness of qualification cards and improving methods for tracking qualification cards to completion. As noted above, MP&L letter AECM-83/0629 identified other corrective actions taken or in progress.

MP&L has taken a further action to eliminate errors in training records and license applications. In the future, the person preparing each application will be required to sign a statement that training records substantiate the training listed on that application. The Operations Training Supervisor, the Training Superintendent, or their designee will independently verify the information on the training record and will sign a similar statement.

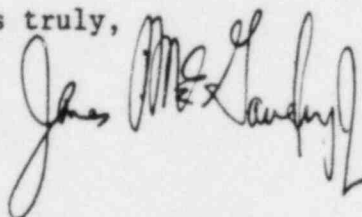
Identification and investigation of these discrepancies were performed by our Training Section. Further, as I requested, our Quality Assurance organization has conducted a completely independent review of these records. All discrepancies identified are discussed in the enclosure. In addition, certain members of our quality assurance management have conducted oral interviews with approximately one-half of the licensed personnel. These interviews provided added assurance that the training subject listed on the applications is valid, with the exception of those discrepancies already identified. All licensed operators will be interviewed prior to November 14, 1983.

Although certain discrepancies involving the accuracy of license applications and training records were identified, MP&L has developed and maintained knowledgeable, well-trained, qualified operators. This conclusion is based, in part, on our review of the extensive training conducted, much of which is not shown on the license applications. Our conclusion is further based on review of in-house and independent examinations given and on experience gained during our preoperational testing phase.

Our investigation, including independent QA assessments, provides assurance that we have identified the nature and scope of the discrepancies. Corrective actions, where necessary, have been identified and are being expeditiously pursued. Based on our review and our meeting with you on October 12, 1983, we believe this satisfies the commitment in our letter, AECM-83/0629, dated September 30, 1983. This information should support the resolution of the matter.

In summary, we firmly believe that our training program is adequate and that our operators are fully qualified to safely operate the Grand Gulf Nuclear Station.

Yours truly,



JPM:lm  
Enclosure

cc: (See Next Page)  
CT2

A25

MISSISSIPPI POWER & LIGHT COMPANY

AECM-83/0681

Page 3

cc: Mr. J. B. Richard (w/a)  
Mr. R. B. McGehee (w/o)  
Mr. T. B. Conner (w/o)  
Mr. G. B. Taylor (w/o)

Mr. Richard C. DeYoung, Director (w/a)  
Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Discussion of Discrepancies Between Operator License Applications and Training Records

Discrepancies identified between operator license applications and training records can be categorized into three general areas. Discrepancies in each area and corrective actions taken are discussed below.

1. Actual durations of training (length of courses) were not as long as those stated on the license application.

It should be emphasized that durations of particular courses can vary for a number of reasons. In particular, it should be noted that license applications are normally forwarded to NRC several weeks prior to NRC examinations. In these cases, training listed may be in progress and/or projected, by date, for completion prior to NRC examination.

Although durations may vary, it is important to note that the required material, or its equivalent, is thoroughly taught and operator candidates are extensively examined by MP&L.

In addition, operator candidates frequently participate in further one-on-one instruction, refresher reviews, and self study programs administered by MP&L.

Based on the following information concerning identified discrepancies and the general conclusion that the required material has been adequately covered by the training provided, no further action is necessary.

- a. Several applications listed one week of Mitigation of Core Damage training. This course was actually taught in only four days.

Our letter, AECM-81/330, dated August 28, 1981, to Harold Denton committed to over eighty hours of Mitigation of Core Damage training. Although only thirty two hours of training were documented for this course, much of the material normally taught in the Mitigation of Core Damage Course was taught, and documented, in other courses. The eight week Grand Gulf Technology (or Systems Course) includes modules on

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fuel design, neutron monitoring and vessel instrumentation. Heat Transfer and Fluid Flow, Emergency Procedures, and FSAR Chapter 15 are taught as individual courses. Each of these areas is a major topic in the Mitigation of Core Damage Course. The duration of training in these related modules totals to over eighty hours, in excess of that committed to in AECM-81/330. After completion of the above noted courses, the remainder of the Mitigation of Core Damage Course was taught in thirty two hours. A review was conducted of the course material and the examination for this four day course. This review substantiated that the material was thoroughly covered.

- b. Several applications listed a thirteen day Plant Operations Course addressing the FSAR, Integrated Operating Instructions, and Emergency Plan Procedures, and a seven day Plant Operations Course addressing Technical Specifications. These were actually taught as a combined fifteen day course. The thirteen day course listed was actually taught in ten days and the seven day course was taught in five days. The course was listed in the training records as a fifteen day course.
- c. Several applications listed a twelve day simulator refresher course which was taught in ten days. The schedule for this training was shown on the applications as 11/12-11/23/82. These applications were submitted in October, 1982, indicating this was training anticipated for completion per the above schedule. Only ten days were required to perform the training.
- d. Several applications listed a thirteen day Plant Operations Course which was actually taught in twelve days.
- e. One application listed a fourteen day simulator refresher training course. The records of this course indicate that it was actually taught in thirteen days.
- f. One application listed a one day QA Indoctrination Course which actually lasted one hour. This was an error in the application as the training records indicate the one hour course. This material can be satisfactorily addressed in one hour.

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- g. Three applications listed a six week Heat Transfer and Fluid Flow Course. A three week course was inadvertently entered twice in these applicants' training records; and, when the application was prepared, the duplicate courses were shown on the application as one six week course. The training records for these individuals have been corrected.
  - h. One application listed one day of fire brigade training which was actually taught in four hours.
  - i. Two applications listed a one week Plant Operations Course which was actually taught in four days. <sup>Two</sup> <sub>Nine</sub> *No evidence*
  - j. One application listed a five month Introduction to Nuclear Power Course which was actually taught in four and one-half months.
2. Documentation did not exist to substantiate certain training listed on applications.

Several cases were identified where documentation in the training records did not substantiate training listed on the license applications; however, based on successfully completed equivalent training, which was documented for each applicant in the training records, we believe the operators to be fully trained and qualified. No further action in these cases is necessary. These discrepancies are discussed below.

- a. Several applications listed a six day Reactor Physics, Core Thermodynamics and Radiation Control Course. There are no records that document this course. Each of these applicants had other equivalent training that thoroughly addresses each of these subjects. Both the MP&L and NRC examinations test this area.
- b. Several applications listed a three day Heat Transfer and Fluid Flow Course, yet documentation does not substantiate this training. Each of these individuals had other equivalent training which thoroughly addresses this material. This material is also well-covered on MP&L and NRC examinations.

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- c. One applicant listed a twelve week Cold License Training Course/Grand Gulf Technology on three different applications. The training records indicate that he did not obtain a passing grade on week 10 of this course. Prior to his third application, he did satisfactorily complete a twenty one week License Operator Exam Preparation Course which thoroughly covered this material.
- d. One application listed a twelve week Grand Gulf Technology - Cold License Training Course. There are no records to verify week 3, 11, or 12, and week 9 is incomplete. This same application listed a three week Heat Transfer and Fluid Flow Course, but there are no records to verify this. This training material was thoroughly covered in a later twenty one week License Operator Exam Preparation Course, which he satisfactorily completed.
- e. One application listed a two week pre-simulator course, but there is no record to verify this. This applicant failed the NRC examination. Another application has been submitted for a December, 1983 NRC examination. He has successfully passed a two and one-half week simulator refresher course since the first application was submitted. This individual is now considered to have adequate documented training in this subject area.
- f. Several applications listed self study retraining or reviews. This self study retraining was performed after the individuals had failed the NRC examination. These individuals had already successfully completed all required training to take the NRC examination. This study was to meet the individual's particular needs. No records are maintained for this type of study. This is considered satisfactory and is only documented in this enclosure because it was entered on the applications.
- g. One applicant listed several courses on his application that he was given credit for teaching rather than taking, but the distinction was not made on the application. His training records will be updated to clarify his function in these courses. Credit for teaching is considered acceptable.

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- h. One application listed a one week Mitigation of Core Damage Course (Brunswick, CP&L), but the training records indicate thirty two hours of actual training. Neither the material covered nor the examination was reviewed since this course was taught at CP&L. However, the applicant successfully passed an examination covering the material of subject at Grand Gulf. This examination provided added assurance that the individual has adequate knowledge in the subject area.
- i. One application listed a five day Mitigation of Core Damage Course. This was on a September, 1981 application. The individual did not pass the examination for the course. Prior to the applicant's 1982 license application submittal, he satisfactorily completed the one week course.

Note that both courses were listed on the 1982 application. Only the second course should have been listed.

- j. Some courses listed on one application were not actually attended but were credited to the applicant by successful completion of examination in each course. The application should have noted that credit for the subject courses was given by examination. This is considered an editorial error. A second application on the same individual correctly indicated credit had been granted by examination.

In two cases, successful completion of equivalent training could not be substantiated. In each case, we believe the individual to be fully trained and qualified; however, since training cannot be substantiated, we have taken specific actions requiring successful completion of training. Each discrepancy, and any action necessary to resolve the matter, is discussed as follows.

- k. One applicant listed a five day Mitigation of Core Damage Course. His training records indicate he attended a total of four days but did not take the examination. This applicant will be required to review the material and pass an examination covering the course material by November 30, 1983.

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1. One applicant listed a seven day Plant Operations Course covering Technical Specifications and a five day Plant Operations Course covering Technical Specifications on his original application in September, 1981. He did not pass the examination on the seven day course, and there is no record of attendance for the five day course. He did not pass his NRC examination. The individual submitted another application in October 1982, which eliminated both the seven day and the five day courses. There is no record of this individual's training in the Technical Specifications; therefore, he will be required to review this material and satisfactorily pass an examination in the first quarter of 1984. The individual has, however, passed both MP&L and NRC examinations on this subject.
3. For the majority of licensed personnel, Qualification Cards were not completed, or cannot be located, as stated in the FSAR and as indicated on the license applications. In addition, Qualification Cards that were completed did not include a Practical Factors Section as required by the FSAR.

The participation in the plant's preoperational test program was considered adequate, practical experience for the cold license candidates. However, to document this practical knowledge, these operators will complete the Practical Factors section of the Qualification Card.

The Practical Factors section of the Qualification Card has now been established for each licensed operator. In many cases, operators performed, or directed another licensed operator to perform, plant surveillances. Where this was the case, Qualification Cards were signed indicating satisfactory completion of the particular practical factor. Where performance of a practical factor cannot be established as described above, successful completion of the practical factor by observed performance in the plant, by use of the simulator, or by walk-through of subject procedures will be required. Each licensed operator will complete the Practical Factors Section prior to November 14, 1983.

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Knowledge factors are considered satisfied based on an individual's documented training, extensive examination results, plant walk-through activities, and simulator training. For these reasons, demonstration and documentation of knowledge factors are redundant to other documented training. However, if our review of Qualification Cards identifies a need for demonstration of knowledge factors, they will be demonstrated and documented.

Based on our evaluation of identified discrepancies and on the corrective actions stated, we firmly believe that our training program is adequate and that our operators are well-qualified.

A25

CAR No. 2042  
Audit No. MAR 83/0133

Unit 1

Due te: November , 1983  
Initiator: W.E. Edge/W.C.Eiff

FINDINGS:

1. Documentation is not available nor adequate to verify some FSAR 13.2 commitments for SRO and RO training. It does not appear any of these items impact status of licenses now held by MP&L SRO's or RO's.
2. Information provided on a number of license applications submitted per 10CFR55.10(a) has been incorrect, unnecessary, and in some limited cases unsubstantiated. This item was identified by Plant Staff prior to the audit. QA has identified a number of other examples. Adequate remedial action to correct existing records and notify the NRC has been taken by Plant Staff. QA has verified all actions taken.
3. Some required entries in training records (including Individual Training History) for licensed operators have been inconsistent, incorrect, or have been left out. Plant Staff identified this item prior to the audit. QA has identified a number of additional errors. Adequate remedial action to correct existing records and notify the NRC has been taken by Plant Staff. QA has verified all actions taken.

COMMITMENT:

1. FSAR Section 13.2
  - a. 13.2.1.1.3 Systems Operation Training (Amendment 47, 4/81)

" . . . This training is designed such that upon completion, the student should be able to discuss the following topics for each of the plant systems:

    - a. Purpose of the system, including design bases
    - b. System components, including locations
    - c. Normal and alternate system lineups
    - d. Normal and alternate power supplies
    - e. Associated limits and alarms
    - f. Interrelationships with other systems
    - g. Automatic features of system operation
    - h. Associated instrumentation, indications, and controls
    - i. Failure modes of controls and instruments
    - j. Normal values for significant parameters"
  - b. 13.2.1.1.4 Simulator Training (Amendment 47, 4/81)

" . . . The Simulator Training Program requires a minimum of 80 hours on the control panel.

The Simulator Training Program shall emphasize plant transients and casualty response. In addition to routine startup and shutdown evolutions, the following faults and casualties, as a minimum, should be discussed, practiced, and critiqued:

    - a. Reactor scram
    - b. Turbine or generator trip
    - c. Loss of coolant, including large and small leaks located inside and outside of primary containment (including leak rate determination)
    - d. Loss of coolant flow/natural circulation
    - e. Loss of all feedwater
    - f. Nuclear instrumentation failure(s)

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COMMITMENT: (con't)

- g. Non-nuclear instrumentation failure(s)
- h. Loss of protective system channel(s)
- i. Mispositioned control rod(s) (or rod drops)
- j. Inability to drive control rods
- k. Conditions requiring use of standby liquid control system
- l. Fuel cladding failure or high activity in reactor coolant or off-gas
- m. Malfunction of automatic control system(s) which affect reactivity
- n. Malfunction of reactor coolant pressure/volume control system
- o. Loss of instrument air
- p. Loss of electrical power and/or degraded power sources
- q. Loss of condenser vacuum
- r. Loss of service water (if required for safety)
- s. Loss of shutdown cooling
- t. Loss of component cooling system or cooling to an individual component
- u. Loss of normal feedwater or normal feedwater system failure
- v. Main steam line break (inside or outside containment)

Exercises involving multiple failures and/or operator error are also included. Utilization of applicable plant procedures and technical specifications during the formal training exercise is maximized.

Candidate performance during simulator training is evaluated by the instructor as each evolution is conducted. Successful completion of simulator training requires a performance examination to certify the individual's ability to safely and competently manipulate the controls of BWR on a reactor operator level during normal, abnormal, and emergency conditions and to understand all indications available during each evolution."

## c. 13.2.1.1.5.3 In-Plant Training (Amendment 49, 7/81)

"a. Prior to initial criticality, candidates not holding or having held an NRC License or having qualified in the Navy Nuclear Power Program shall spend at least 4 weeks at an operating BWR (should be at or above 20 percent power) observing the day-to-day operation of the plant. The candidates shall be under the direct supervision and guidance of an individual who is qualified in accordance with 10 CFR 55.9 (b). Each candidate should complete a checklist detailing those operations/evolutions to be performed, simulated, observed, and/or discussed. This checklist contains specific requirements in such areas as:

1. Plant operation from the control room
2. Local control and operation of equipment
3. Surveillance testing
4. System valve and electrical lineups
5. System component operation (i.e., pump startup and shutdown)
6. System interactions and indication

Each checklist requirement is signed off by the qualified individual observing and supervising the candidate as the requirement is being accomplished.

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The license candidate shall also gain experience in the operation of the Grand Gulf Nuclear Station through participation in plant operating procedure preparation and verification and/or pre-operational inspection of plant systems.

COMMITMENT: (con't)

performance while on shift is monitored by the shift supervisor who shall provide an evaluation of the candidate's operating abilities at the conclusion of this training phase.

- b. After initial plant criticality, each license candidate shall spend at least 3 months on shift in a training status in the GGNS control room. During this period, the candidate shall carry out the duties of a control room operator under the direct supervision and guidance of the licensed control room operator. The candidate's performance is monitored by the shift supervisor who shall provide an evaluation of the candidate upon the conclusion of this training phase. . . . ."

## 2. 10CFR55.10(a) 1/1/83

" . . . . The application must be submitted in triplicate, except for the report of medical examination, and must contain the following information: . . . . .

- (2) The education and pertinent experience of the applicant, including detailed information on the extent and nature of responsibility; . . .
- (6) Evidence that the applicant has learned to operate the controls in a competent and safe manner and has need for an operator or a senior operator license in the performance of his duties. The Commission may accept as proof of this a certification of an authorized representative of the facility licensee where the applicant's services must be utilized. This certification must include details on courses of instruction administered by the facility licensee, number of course hours, number of hours of training and nature of training received at the facility, and for reactors, the startup and shutdown experience received."

## 3. PAP 01-S-04-14, Rev. 6

- " . . . .
- 2.2 The training Supervisor is responsible for ensuring that all necessary entries are made in the Training Records."

DISCUSSION:

Plant Staff identified that a number of problems existed on licensed operator training records. An investigation was initiated by the Training Section to identify the extent of the problem. QA was requested to audit the area and identified more examples to add to those already being corrected by Plant Staff.

In addition FSAR 13.2 commitments portions 13.2.1.1.3, 13.2.1.1.4, and 13.2.1.1.5.3 are not documented or evidence is not available to ascertain compliance to commitments. The following are examples of this nonconformance:

DISCUSSION: (con't)

<u>FSAR Section/Title</u>	<u>Comment</u>
13.2.1.1.3/ Systems Operation Training	The training as provided by training contractor(s) may cover "each of the GGNS systems over which the licensed control room operator has control or cognizance"; however, documentation is not provided to MP&L Further those items listed in "a" through "j" are not evident as being topics for which a student can discuss for each plant system.
13.2.1.1.4/Simulator Training	The training as provided by training contractor(s) may require a minimum of 80 hours on the control panels; however, documentation consists of a certificate giving a number of weeks with a letter which does not describe the Simulator Training Program. The faults and casualties to be discussed, practiced, and critiqued for items "a" through "v" are not covered in available documentation from the contractor. The required "performance examination" is not included in any examined contractor documentation.
13.2.1.1.5.3/In-Plant Training	The training consisting of 4 weeks at an operating BWR which should be at or above 20 percent power is not verifiable from available documentation supplied by the training contractor. Evidence of being under direct supervision of an 10CFR55.9(b) qualified individual is not available nor is the required checklist available. The shift supervisor providing "... an evaluation of the candidate's operating abilities at the conclusion of this training phase." is not documented on training records available for review. This commitment applies to both prior to and after initial criticality. [Note: Prior to initial criticality only applies to those operators in training after July 1981 and prior to June 16, 1982.]

ACTIONS REQUIRED:

A written response is required to this CAR by 12/2/83. Your response must include a determination of the cause, remedial action taken, and measures taken to preclude recurrence.

*William C. H.* 11/2/83  
Director / Date

*Steve Little* 11-2-83  
Manager of Quality Organizational Unit / Date **A26**

ITEM IDENTIFICATION: CAR # 2042, MAR # 23/C133, DATE ISSUED 11/2/83

ORGANIZATION/INDIVIDUAL RESPONSIBLE FOR RESPONSE: Plant Staff/Training

REPORTABILITY: SIGNIFICANT ? YES ☐ NO ☒ INDETERMINATE ☐ BY col

PRD INITIATED ? YES ☐ NO ☐ PRD NO. 0

QA POLICY; TECH. SPECS.; FSAR REQ. \_\_\_\_\_

RESPONSE DUE DATE: 12/2/83 EXTENSION \_\_\_\_\_

CAR RESPONSIBLE FOR FOLLOWUP: William C. E. ff

STATUS: CAR issued 11/2/83

FINAL DISPOSITION: CLOSED BY \_\_\_\_\_ DATE \_\_\_\_\_; REVIEWED BY \_\_\_\_\_ DATE \_\_\_\_\_

A26

MEMO TO: Mr. C. K. McCoy, Nuclear Plant Manager  
FROM: S. M. Feith, Nuclear Site QA Manager  
SUBJECT: MAR 83/0133, Training & Qualification of Licensed Operators  
with Attached CAR 2042  
FILE: 0290/0490/15810/16694.4  
MAR: 83/0133

Attached you will find the final report of an audit conducted to examine the training and qualification of licensed operators.

During the audit, several nonconformances were identified regarding the amount of training several licensed operators received vs. the amount documented on license applications. These nonconformances were added to those previously identified in the draft to AECM 83/0681. Documentation to verify compliance with certain FSAR Section 13.2 commitments was not available. Corrective Action Request (CAR) 2042 is being issued to track these nonconformances.

Please respond to this CAR by December 2, 1983. Your response should include determination of cause, remedial action taken, and measures taken to preclude recurrence.

If you have any questions in regard to this audit report, please contact Bill Biff at extension 3201.

We sincerely appreciate the cooperation we received during the course of the audit.

*Steve Feith*

S. M. Feith  
11/2/83

WEE:WCE:SMF:ks

Attachment: A-Audit Report  
B-Corrective Action Request  
C-Completed Checklist (Not to Addressee)  
D-CAR Status Form (Not to Addressee)

cc: Mr. J. B. Richard w/A & B  
Mr. J. P. McGaughy, Jr. w/A & B  
Mr. T. E. Reaves, Jr. w/A & B  
Mr. J. F. Pinto w/A & B  
Mr. T. H. Cloninger w/A & B  
Mr. L. F. Daughtery w/A & B  
Mr. C. C. Hayes w/A & B  
Mr. J. E. Reaves w/A & B  
Mr. D. L. Hunt w/A & B  
Audit Report File w/A, B, C & D  
Manual File w/A, B, C & D  
CAR File w/A, B, C & D  
LCIS File w/A, B, C & D  
Plant File, GGNS w/A, B, C & D  
Project File w/A, B, C & D

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= A6

104 [initials]



SUMMARY OF ITEMS TO BE DISCUSSED  
BY TELEPHONE WITH MP&L ON NOVEMBER 9, 1983

1. Assign qualified operationally oriented staff to review and modify, as appropriate, qualification cards.
2. Select MP&L, and if desired contract examiners to examine operational staff on revised qual cards. Inform NRC of selection criteria.
3. Examine licensed RO's and SRO's, candidates who have taken NRC exam, shift advisors, STA's on revised qual card knowledge and practical factors. Also examine or otherwise verify level of knowledge in areas of theory, HP, EP and TS. Candidates should be individually examined.
4. Weaknesses and deficiencies noted during examinations will be documented. Qual cards will not be signed until satisfactory performance and knowledge is demonstrated.
5. Establish program for evaluating exam results and taking actions such as training and removing deficient operators from licensed duties.
6. Documented deficiencies and weaknesses will be evaluated upon completion of all examinations and future training will be modified as appropriate based upon the results of this evaluation.

*MP&L Letter Draft 11/9*

*Plant Knowledge Verif Program*

cc: J. Olshinski  
D. Verrelli  
C. Julian  
B. Wilson  
A. Gibson  
R. Lewis

- 1) NRC licensed operators oral on qual card
- 2) qual card revise (before 1)
- 3) examiners are SRO, certified by management
- 2 system
- 4) Plant Manager 3 asst will observe
- 5) corp will audit
- 6) if weak will remove
- 7) review requal + NRC exams
- 8) proc def + Labels will be doc for correction

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- 1) SRO to training
  - 2) Ope asst for training
  - 3) training support supervisor
  - 4) Consolidate

- 5) Off training center
- 6) STA, advisor train with shift

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MP&L OPERATOR LICENSING ISSUES

I. Reexamination/Recertification of Operators

- A. Upgrade Qual cards
  - (1.) Remove unnecessary items
  - (2.) Add required items
  - (3.) Designate people qualified to make these revisions
- B. Recertification must address the following areas (either on Qual Cards of Documented Recertification)
  - (1.) Health Physics
  - (2.) Emergency Planning
  - (3.) Technical Specifications
  - (4.) Abbreviated courses previously identified

*Have they identified problems?*
- C. Personnel to be Recertified:
  - (1.) All licensed operators *29*
  - (2.) All candidates (on those systems they have signed off) *no later*
  - (3.) STAs *no*
  - (4.) Shift Advisors *no*
- D. Qualification/Certification of Qualifiers
  - (1.) Establish
- E. Recertification/Reexamination Process
  - (1.) Individual examinations *2 not*
  - (2.) Examinations/all deficiencies will be documented
  - (3.) Certification board will provide final report/results on recertification
  - (4.) Practical Factors will be accomplished
- F. Deficiencies Identified
  - (1.) Program to retrain
  - (2.) Program to assess removing from licensed duties
  - (3.) Program to factor weakness areas back into training program

II. Correction of Qualification Program Weaknesses

- A. Identification and Correction of Root Cause
  - (1.) Management Issues
- B. Reason why Problem had not Been Previously Identified and Corrected by MP&L
  - (1.) Management issues
- C. Justification for plant future capability to operate given identified training program weaknesses and lack of experience of plant personnel.

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

DEC 5 1983

Mississippi Power and Light Company  
ATTN: Mr. D. C. Lutken, President  
P. O. Box 1640  
Jackson, MS 39205

Gentlemen:

SUBJECT: CONFIRMATION OF ACTION - GRAND GULF 1, DOCKET NO. 50-416

This refers to a meeting held in the Region II offices on November 18, 1983, with Mr. J. B. Richard, Senior Vice President, concerning matters related to work to be completed at Grand Gulf. With regard to the matters discussed, it is our understanding that Mississippi Power and Light Company (MP&L) will take the following actions:

1. Prior to exceeding 5% power, MP&L will complete the recertification program for the operating staff as described in MP&L's presentation to the NRC in the November 18, 1983 meeting and documented in your letter AECM-83/0750 dated November 21, 1983 and provide a report to this office of the results of the recertification program including supplemental training provided to the operating staff. The meeting summary was provided to MP&L in our letter of November 23, 1983.
2. Prior to exceeding 5% power, the Plant Safety Review Committee (PSRC) will conduct a complete review of previously identified plant discrepancy reports to assure that any safety related deficiencies in hardware or procedures are properly dispositioned. MP&L will provide a copy of the report of this review as approved by the PSRC to this office.
3. Prior to August 1, 1984, MP&L will conduct a review of plant administrative procedures and correct instances of improper use, as described in NRC Inspection Report 50-416/83-43, of the words "should" or "must".

In addition to the above, we have reviewed and concur in the actions you committed to accomplish in your letter AECM-83/0727 of November 10, 1983. We understand that you have removed from all licensed duties the individuals holding license numbers, Senior Reactor Operator SOP-20108, Senior Reactor Operator SOP-4216, Reactor Operator OP-6239 and Reactor Operator OP-6241, effective November 4, 1983. MP&L will provide supplementary training for these individuals in those areas where weaknesses in their training are identified. MP&L will provide the results of your review, and supplemental training provided, to this office prior to returning these individuals to licensed duties.

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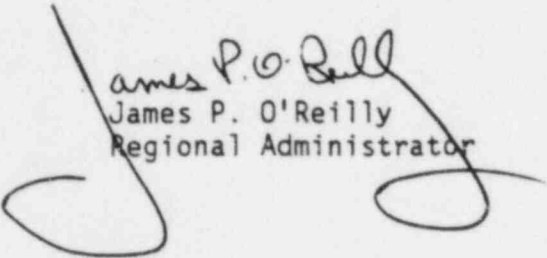
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DEC 5 1983

Please inform this office immediately if your understanding is different from that stated above.

Sincerely,

  
James P. O'Reilly  
Regional Administrator

COA 416/83-01

cc: F. W. Lewis, President  
Middle South Services, Inc.  
J. E. Cross, Plant Manager

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

*Friedrickson*

DEC 20 1983

Mississippi Power and Light Company  
ATTN: Mr. J. B. Richard  
Senior Vice President, Nuclear  
P. O. Box 1640  
Jackson, MS 39205

Gentlemen:

SUBJECT: REPORT NO. 50-416/83-53

This refers to the routine inspection conducted by Mr. B. A. Wilson of this office on October 31 - November 4, 1983, of activities authorized by NRC License No. NPF-13 for the Grand Gulf facility. Our preliminary findings were discussed with you and members of your staff at the conclusion of the inspection.

Areas examined during the inspection and our findings are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspectors.

During the inspection, it was found that certain activities under your license appear to violate NRC requirements. These items and references to pertinent requirements are listed in the Notice of Violation enclosed herewith as Appendix A. Elements to be included in your response are delineated in Appendix A.

During the inspection, it was found that certain activities under your license appeared to deviate from commitments in the Final Safety Analysis Report (FSAR) and have safety significance. These items are identified in the Notice of Deviation enclosed herewith as Appendix B. Please provide us in writing within 30 days of your receipt of this letter your comments including a description of corrective actions that have been or will be taken, corrective actions which will be taken to avoid further deviations, and the date your corrective actions were or will be completed.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained in the inspection report, please notify this office by telephone and include a written application, to withhold information contained therein, in your response. Such application must be consistent with the requirements of 2.790(b)(1).

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

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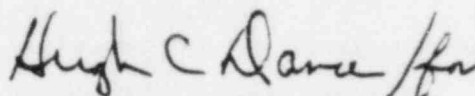
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Mississippi Power and Light Company 2

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,



Richard C. Lewis, Director  
Division of Project and  
Resident Programs

Enclosures:

1. Appendix A, Notice of Violation
2. Appendix B, Notice of Deviation
3. Inspection Report No. 50-416/83-53

cc w/encls:

Ralph T. Lally, Manager of Quality  
Middle South Services, Inc.  
J. E. Cross, Plant Manager

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APPENDIX A  
NOTICE OF VIOLATION

Mississippi Power & Light  
Grand Gulf

Docket No. 50-416  
License No. NPF-13

As a result of the inspection conducted on October 31 - November 4, 1983, and in accordance with the NRC Enforcement Policy, 47 FR 9987 (March 9, 1982), the following violation was identified.

10 CFR 50.59 requires a written safety evaluation be performed for significant changes in procedures as described in the FSAR.

Contrary to the above, as of November 4, 1983, the licensee had implemented Procedure 01-S-04-1, Rev. 4, which included a significant deviation from FSAR Section 13.2 in that the practical factors section of licensed operator candidate on-shift training was deleted. The deletion was not recognized as a change to a procedure required by the FSAR, therefore no safety evaluation was required and no FSAR change was identified for a future FSAR revision.

This is a Severity Level IV Violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

Date: DEC 20 1983

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APPENDIX B

NOTICE OF DEVIATION

Mississippi Power & Light  
Grand Gulf

Docket No. 50-416  
License No. NPF-13

Based on the results of the NRC inspection conducted on October 31 - November 4, 1983, certain of your activities appear to deviate from your commitments to the Commission as indicated below:

- A. Paragraph 13.2.1.1.5.3 of the Final Safety Analysis Report states that each license candidate shall spend a period of time on-shift in a training status under the direct supervision and guidance of a licensed control room operator and shall complete a qualification card by accomplishing/discussing the items on the qualification card under the observation of the qualified individual.

Contrary to the above, on August 30 through September 2, 1983, methods were utilized to complete four Senior Reactor Operator candidates' qualification cards which included numerous signoffs in a short period of time, signoffs by non-licensed personnel, and evaluation by group lecture and discussion in the simulator rather than plant walk through. These methods did not provide the level of training and evaluation of candidate's knowledge described in the FSAR.

- B. Paragraph 13.2.1.1.6 of the Final Safety Analysis Report states that an operator training evaluation board will review the candidate's training record to verify that all NRC license examination prerequisites are met.

Contrary to the above, in all candidate reviews conducted to date the board did not conduct nor delegate the responsibility for a records review of license examination prerequisites prior to recommending that candidates take the NRC exam.

~~8402280444~~

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

Report No.: 50-416/83-53

Licensee: Mississippi Power and Light Company  
Jackson, MS 39205

Docket No.: 50-416

License No.: NPF-13

Facility Name: Grand Gulf 1

Inspection at Grand Gulf site near Port Gibson, Mississippi

Inspectors: B. A. Wilson

B. A. Wilson

12/13/83

Date Signed

C. A. Julian

C. A. Julian

12/13/83

Date Signed

B. A. Wilson, for

J. F. Munro

12/13/83

Date Signed

B. A. Wilson, for

C. W. Hehl

12/13/83

Date Signed

L. J. Watson

L. J. Watson

12/13/83

Date Signed

Approved by: A. F. Gibson

A. F. Gibson, Operational Programs Branch Chief  
Division of Engineering and Operational Programs

12/14/83

Date Signed

SUMMARY

Inspection on October 31 through November 4, 1983

Areas Inspected

This special, announced inspection involved 181 inspector-hours on site in the areas of Training Organization, Evaluation of Licensed Operators, Reviews of Licensee Action to Resolve Items Identified in Previous Training Assessment and Use of Contractors in Training Program.

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## Results

Of the four areas inspected, no violations or deviations were identified in two areas. Two apparent deviations were found in two areas (Failure to complete qualification cards to meet FSAR commitments, paragraph 6.d; Failure of Operator Training Evaluation Committee to conduct records review of candidates' training for operator licenses, paragraph 7.b.). One apparent violation was found in one area (Failure to perform adequate 10 CFR 50.59 evaluation, paragraph 7.a.4.)

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

J. B. Richard, Senior Vice President  
J. P. McGaughy, Jr., Vice President  
C. K. McCoy, Plant Manager  
J. E. Cross, Assistant Plant Manager  
J. W. Yelverton, Assistant Plant Manager  
D. Hunt, Training Superintendent  
T. E. Reaves, Jr., Manager, QA  
J. D. Bailey, Compliance Coordinator

Other licensee employees contacted included operators, instructors and office personnel.

#### NRC Resident Inspector

A. G. Wagner

### 2. Exit Interview

The inspection scope and findings were summarized on November 4, 1983, with those persons listed in paragraph 1 above. The inspectors stated that several identified discrepancies would be reviewed by regional management for enforcement actions. The licensee acknowledged the inspection findings. Licensee representatives agreed to remove from licensed duties three individuals who exhibited deficiencies during plant walkthroughs and one recently licensed individual whose qualification card signoffs were suspect.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Training Organization

The current MP&L training organization was discussed with the licensee. The Training Superintendent, Mr. D. L. Hunt, assumed his responsibilities in February 1982. MP&L has increased the size of the training organization from twelve people in early 1982 to its present allocation of 42. The organization is responsible for all areas of training including security, health physics, general employee training and licensed operator training. Of the 21 positions devoted primarily to RO and SRO training, 18 are occupied by Quadrex contractor personnel. The position of Operations Training Superintendent was recently vacated by an MP&L employee, although a

qualified replacement has been identified from the ranks of SRO licensed personnel and is scheduled to occupy the position in the near future. The other two MP&L employees who perform licensed training are currently licensed SROs. It is MP&L's intention to replace the Quadrex instructors with MP&L SROs over the next three years.

MP&L has initiated programs with Hinds Junior College of Clinton, MS and Memphis State University to provide college level trained personnel to the Operations Department. Their plans appear to provide for adequate staffing, for SRO degree requirements and to meet INPO criteria including accreditation. They have completed their accreditation self-evaluation and have tentatively scheduled INPO meetings and discussions with a view toward accreditation in early to mid-1984.

In addition, the training organization is making progress towards replacing antiquated records keeping systems with more up-to-date automated systems and expect to move into modern training facilities in early 1984.

There appears to be a division in the present training organization since it is physically divided between two buildings. Most of the supervisors, clerical staff and unlicensed training instructors occupy offices in the old training building while those devoted to licensed personnel training are located in the new building which also houses the simulator. This physical division has apparently created an organizational division. Several examples of lack of coordination were observed by the inspectors during this inspection. This problem is expected to be alleviated when the entire training organization is moved to the new building.

## 6. Evaluation of Licensed Operators

### a. Plant Modification/Design Change Training Program

As identified during the February 1983 NRC Training Assessment of GGNS (IE Report 416/83-06), an effective program did not exist to evaluate Design Change Packages (DCPs) for required training, retraining, changes to Lesson Plans (LP) and/or changes to System Descriptions (SD). As a result of these findings, MP&L committed to evaluate the outstanding DCPs and conduct training as required prior to re-start of Unit 1. MP&L was also to establish a more effective program for evaluation and training on future DCPs. NRC inspections during July and August 1983 confirmed that progress had been made on implementation of these commitments. However, in an inspection on September 26 - October 14, 1983, the resident inspector identified eight DCPs for which training had not been given for all operating personnel. This apparent deviation is discussed in Inspection Report 416/83-50. During this inspection, the newly instituted program for evaluating DCPs and implementing required training and training material changes was reviewed.

GGNS Administrative Procedure 01-S-07-4, "Plant Modifications", requires as part of the DCP processing, a review of the DCP by both Operations (or other affected departments) and Training to determine applicable training. The Operations Superintendent is responsible for providing for the immediate training of his personnel prior to the change being declared operable and turned over to operations. The Training Superintendent is responsible for incorporating the change as required into the training and retraining programs. The Training Department implements this requirement in accordance with Training Section Instruction (TSI) 14-S-02-11, "Design Change Package Review."

A review of TSI 14-S-02-11, Revision 0, dated September 7, 1983, determined that the procedure appeared to adequately outline training personnel responsibilities regarding the review of DCPs and incorporation of identified materials into the training program. Subsequent implementation review determined that all DCPs were being reviewed by a training person holding a senior reactor operator license and required changes were being identified for incorporation into the training and retraining program materials. During this implementation review, the following inspector concern was identified.

Subsequent to the DCP training review, those DCPs determined to require training material changes are routed to an instructor who actually prepares the required LP or SD change. Once the training material change is prepared, it is placed in the applicable master LP or SD file pending rewrite of the LP or SD. The concern here is with the absence of controls to ensure that the identified changes are incorporated into the LPs utilized by the instructors. At the time of this review, the master LP/SD files were located in the old training building while the instructors were located in the new training building. As a result of the physical separation, the instructors maintained their own LP files in the new building and utilize these files for preparing their training. It is readily apparent that a significant potential exists for the identified changes not finding their way into the classroom. This situation was discussed with the licensee and the licensee committed to resolve this concern. This concern will remain open pending licensee resolution. This concern is not applicable to the DCP training conducted prior to Unit 1 restart as that training was implemented using different procedures. This is identified as Inspector Followup Item 416/83-53-01.

b. Operator Interviews

During the conduct of this inspection, walkthrough type interviews were conducted by NRC operator licensing examiners for thirteen randomly selected licensed operators. The group of licensed operators interviewed included six senior reactor operators (SRO) and seven reactor operators (RO). These interviews were conducted at the GGNS simulator and "in plant" at GGNS. Six operators (3-RO, 3-SRO) were evaluated using the simulator, and seven operators (4-RO, 3 SRO) were evaluated "in plant".

The purpose of these interviews were threefold:

1. Evaluate the ability of licensed operators to perform selected practical factors and knowledge factors from the GGNS Licensed Operator Qualification Card.
2. Evaluate whether these operators possessed the necessary "background" or system knowledge required to perform the selected procedures.
3. Evaluate the effectiveness of recent plant modifications (DCP) training received just prior to GGNS restart.

The results of these evaluations are as follows. Three individuals exhibited significant weaknesses with regard to both procedural performance and related basic system knowledge. The following specific observations were made by the assessment team as a result of these walkthroughs:

- Two licensed operators could not perform the daily surveillance procedure, Jet Pump Functional Test (06-OP-1B33-D-0001). Both operators had difficulty discerning the proper instrumentation reading and related units for data recording. In addition, confusion existed at times as to the significance of these readings, as well as their process instrumentation flow path. One operator could not complete the procedure due to an admitted lack of understanding.
- One senior operator could not locate the Remote Shutdown Panel during a walkthrough of the Off-Normal Event Procedure, 05-1-02-II-1. In addition, this operator did not understand the capabilities of the RHR system on the panel, nor could he locate the local copy of the procedure once the panel was located. The remote shutdown panel was located following another operator's directions to the panel.
- One operator could not properly walkthrough a local paralleling operation of the HPCS diesel generator with offsite power source, Procedure 04-1-01-P81-1. The operator checked the wrong instrumentation, identified incorrectly a switch required to be re-positioned, and skipped a required procedure step.
- One operator (evaluated in the simulator) was unable to diagnose a "tripped" condition of a reactor feedpump (RFP) indicated by lights on the main control board. Consequently, the operator failed to reset the RFP trip and was unable to perform a RFP startup, Procedure 04-1-01-N21-1.



It should be noted that the above walkthroughs were all conducted with the operator utilizing the referenced procedures. The above evaluations were discussed with the licensee at the exit interview and three individuals who demonstrated extensive deficiencies were removed from the licensed duties by the licensee pending retraining.

As identified above, one of the purposes of these interviews was to evaluate the effectiveness of the recently completed DCP training. To perform this evaluation, the licensed operators were questioned to determine knowledge of seven DCPs selected from those on which training had been conducted. Most of the interviewees demonstrated adequate familiarity with approximately 2/3 of the selected DCPs. None of the operators could recall all seven DCP's. Based on these results, the effectiveness of the DCP training conducted just prior to the restart is considered marginal. Further evaluation of the DCP training will be made considering the licensee's response to the apparent deviation identified in Inspection Report 416/83-50 as discussed in 6.a. above.

c. Additional Concerns Identified During Evaluations

During the conduct of the walkthrough interviews several concerns not directly associated with the stated purpose of these evaluations were identified:

1. The inspectors noted the general lack of pertinent procedures at local control stations. With the exception of the procedures for shutting down the plant from the remote shutdown panel, which was kept under lock and key near the remote shutdown panel, no other procedure copies were found at local control stations. The present GGNS program for procedural control requires the operator to have a copy of the applicable procedure xeroxed and stamped prior to proceeding to the local panel. This situation, although not regulatorily incorrect, may result in an operator performing local operations without the procedure rather than working under the present time consuming and cumbersome program.
2. Component labeling (valve numbers) of switches at local panel 1H22-P175 for feedwater system valves was found incorrect. Interviews with operators determined that other labeling deficiencies may exist on other panels. This is identified as Inspector Followup Item 416/83-53-02.
3. Three operators improperly frisked per the posted procedure for radioactive contamination control during plant tours. This is identified as Inspector Followup Item 416/83-53-03 and will be reviewed during future inspections.

d. Deficiencies in Implementation of Qualification Cards

In August, 1983, MP&L requested the NRC to reschedule the exam date for six SRO candidates from November to September. This required acceleration of their training schedule by six weeks. To meet exam eligibility requirements, all candidates were required to meet the FSAR commitments (Section 13.2) including completion of qualification cards (qual cards). Through discussions with the MP&L staff and examination of records, the inspection team determined that the qual cards for four of the six candidates were completed from primarily August 30 to September 1, 1983. These four candidates were "Instant" SROs whereas the other two were previously licensed ROs who completed their qual cards over a more lengthy period of time.

During discussions with the Quadrex instructors the inspector found that Quadrex was directed by MP&L to complete the qual cards for the four instant SROs by the first week in September. Section I of the two section qual card requires approximately 500 signatures for all four individuals. Inspection of the completed cards showed 143 of these signatures made on September 1, 1983. All of the evaluations were made in the Grand Gulf simulator and in classroom discussions with all four individuals in a group and apparently none of the evaluations were made during in-plant walk-thrus.

The Grand Gulf FSAR, Section 13.2.1.1.5.3, states that each licensed candidate shall spend a period of time on-shift in a training status under the direct supervision and guidance of a licensed control room operator. The FSAR states that each candidate is provided with a control room operator qualification card which contains knowledge factors and practical factors to be accomplished/discussed while in an on-shift training status. It appears that the methods used to complete the qual cards, i.e. examination and signoff of multiple students in very short periods of time by unlicensed instructors without actual plant walkthrus did not result in the type of evaluation committed to in the FSAR. This is identified as Deviation 416/83-53-04.

Two of the four instant SROs and both of the upgrade SRO candidates passed the NRC examination in September. Only one license was issued while the other three were held pending completion of other requirements for supervisory training and observation of actual plant operation at a comparable facility. Since the completion of the qual cards was accomplished in a manner which appeared to deviate from the FSAR, NRC requested and MP&L agreed to remove the one recently licensed individual from licensed duties and was informed that the remaining licenses would not be issued until the qual card issue was resolved.



7. Reviews of Licensee Actions to Resolve Items Identified in Previous Training Assessment

A special training assessment for the Grand Gulf facility was conducted by the NRC in February 1983. The training assessment was documented in NRC Inspection Report 416/83-06 and 417/83-03 dated March 29, 1983. The inspectors reexamined the areas reviewed during the February 1983 training assessment to determine the status of the training program in those areas.

a. Licensed and Non-Licensed Operator Training

1. Classroom Training

Concerns identified with utilization of contract instructors are discussed in Section 8 of this report.

2. Simulator Training

The results of GGNS administered requalification training utilizing the GGNS simulator were reviewed. The simulator evaluations identified marginal and unacceptable performance in certain areas for three of the individuals reviewed. An independent assessment of operators performance, discussed in Section 6.b., showed that the same operators continued to exhibit lack of sufficient knowledge in the areas identified by the simulator evaluations. In addition it appeared from review of all of the records that generic deficiencies may exist, in that there were marginal levels of knowledge in secondary plant controls such as feedwater control and in nuclear instrumentation on several evaluations. There was no mechanism identified to the inspectors to provide additional training in marginal and unacceptable areas, as long as the operator passed the overall requalification evaluation. Criteria for judgements on what constitutes an acceptable requalification evaluation were also not identified to the inspectors. This weakness in the training program was acknowledged by the licensee during the exit interview. This is identified as Inspector Followup Item 416/83-53-05 pending incorporation by the licensee of methods to improve marginal and unacceptable performance and identify generically weak areas in the training program. It was noted that those operators relieved of licensed duties, as discussed in Section 6.b., could have received additional training to eliminate their weak areas had this type of program been in use.

3. Training Materials

One weakness identified in the preparation of lesson plans and system descriptions is discussed in Section 6.a.

#### 4. Qualification Card Program

Reviews of actual implementation of the qualification card (qual card) program is discussed in Section 6. A review was also conducted of the control and documentation procedures for the qual card. The following procedures, including older revisions of the procedures and instructions were reviewed to determine the evolution of the license candidate qual card and the content of current qual cards:

01-S-04-1	Rev. 4, September 13, 1983	Licensed Operator Training and Quali- fication Program
01-S-04-1	Rev. 0, November 14, 1980	Licensed Operator Training and Quali- fication Program
01-S-04-1	Rev. 5, (Proposed Rev.)	Licensed Operator Training and Quali- fication Program
14-S-02-06	Rev. 0, August 11, 1983	Licensed Operator Training Program Implementation
01-S-04-14	Rev. 6, August 31, 1983	Training Records

Procedure 01-S-04-1 is a plant administrative procedure providing general requirements for qual card implementation. A review of Rev. 4 of this procedure dated September 13, 1983 against FSAR commitments indicated that FSAR commitments had been eliminated in the approved revision. An example of a commitment eliminated was the deletion of the practical factors section of the qual card as committed in FSAR Section 13.2.1.1.5.3. In addition wording in the procedure on experience levels for licensed operators is ambiguous and it is not clear that the procedure meets the requirements of ANSI N18.1-1971 as required by Technical Specification 6.3.

In addition, other areas were identified where FSAR commitments were not clearly addressed or had been changed. A discussion with the licensee indicated that an FSAR review had been completed for previous revisions and that FSAR change requests were in progress for many of the changes. However, for some of the FSAR commitments modified or deleted by Rev. 4, changes in the program were not backed up by FSAR change requests.

Revision 4 of 01-S-04-1 is stamped with a "Safety Evaluation Applicability Review" designation which indicates that the revision contains no change to procedures as described in the FSAR and that no safety evaluation was necessary. It is apparent that at least one change, i.e., the elimination of training on practical factors is a substantive change to FSAR commitments. Failure to perform a safety evaluation as required by 10 CFR 50.59 is identified as Violation 416/83-53-06.

The inspector also reviewed the proposed Revision 5 and noted that this procedure also deviated from FSAR commitments. The inspector recommended that the FSAR commitments be reviewed by the licensee in detail to assure that the efforts being made to improve the training program are incorporated into the FSAR and that substantive changes be given appropriate safety evaluations as required by 10 CFR 50.59.

Instruction 14-S-02-6, Revision 0, dated August 11, 1983, is a training section instruction which addresses the qual cards. Attachment I confused (reversed) the nuclear power plant experience levels required for ROs and SROs with on site experience requirements and did not document technical training credited toward experience levels. No other significant concerns were identified.

Procedures 01-S-04-14, Revision 6, dated August 31, 1983, is an administrative procedure on training records. This procedure and selected training records were reviewed. It was noted that the licensee had made numerous corrections to the training records to agree with existing documentation and to eliminate duplicate entries. The licensee stated that the records were being reviewed for deficiencies and would be placed back in order according to procedure upon completion of the review. No other concerns were identified.

#### 5. Fifth Week Training

The licensee was utilizing a four shift schedule at the time of the inspection. The licensee stated that five shifts with one shift designated for training would begin when licensed operators were reinstated and withheld licenses were issued.

#### 6. Requalification Training

Procedure 01-S-04-2, "Licensed Operator Requalification Training," Revision 2, dated July 14, 1983, is an administrative procedure providing requirements for requalification training. The following concern was identified. Section 6.7.3 of the procedure states that license holders must stand one watch every four months to satisfy the minimum requirements for on-shift duty to maintain their licenses. The NRC maintains that an individual must stand

one 8-hour watch at least once per month to be considered on "active status." This item will be discussed further with the licensee and is identified as Inspector Followup Item 416/83-53-07.

b. Review of Training Audits and Operator Training Evaluation Committee (OTEC) Results

The inspectors reviewed the NRC style comprehensive written examinations and OTEC evaluations given to licensed operators. The following comments were made during the review. The licensee does not appear to review the results of the examinations or OTEC evaluations for generic weaknesses or to identify weak areas in an individual's knowledge. FSAR Section 13.2.1.1.6 states that an operator training evaluation board will review the candidate's training record to verify that all NRC license examination prerequisites are met and to evaluate the candidate's ability to safely and competently operate the plant and obtain the required license. A review of the training records and discussions with the licensee indicate that the evaluation board was established and examined candidates by oral examination prior to recommendation for the NRC exam. However, it appears that the board did not conduct nor delegate the responsibility for a records review of license examination prerequisites. This is identified as Deviation 416/83-53-08.

The licensee was in the process of formalizing the evaluation board's oral exam criteria. Forms utilized for the oral exam for the six SRO candidates tested by the NRC in September 1983, were reviewed. It was noted that the individuals who failed the NRC exam received marginal ratings in some categories but were considered as acceptable candidates.

The records of the NRC style examination given to the first group of operator license candidates by a contractor, were reviewed. According to the contractor's results, of the 33 individuals examined only two scored high enough in all areas to meet the NRC pass/fail criteria.

The inspector questioned why those individuals were considered ready for the NRC exam. The Plant Manager stated that another contractor was brought in to give individual one-on-one help to all candidates in all weak areas. The inspector confirmed by interviews of several individuals that supplementary contractor training was done, but there was apparently no records kept of such training.

c. Training on Procedural Changes, Design Changes and Significant Events

The review of this area is addressed in Section 6.a.



## 8. Extent of Involvement of Contractors and Effectiveness of Utilization

MP&L established a three year contract with Quadrex Corporation to provide 18 instructors "to perform training and instruction for non-licensed operators training, licensed candidate training, requalification training, and Reactor Operator to Senior Reactor Operator upgrade training (classroom and simulator)." The term of the contract is until December 31, 1985. Quadrex is very heavily involved in all phases of the MP&L licensed personnel training programs. Only two of the people assigned as operator training instructors are MP&L employees. Consequently, many of the routine tasks not directly involved with instruction or evaluation of licensed candidates are handled by Quadrex people. It is MP&L's intention to replace all Quadrex instructors with MP&L instructors who hold SRO licenses. The rate of replacement is currently projected at about 5 per year until early 1986. In the meantime Quadrex instructs MP&L personnel about six hours per day with two hours per day plus overtime allotted for preparation for their upcoming NRC certification examination. Additional overtime is often used in support of other routine MP&L training functions.

The previous training assessment report (IE Inspection Report 416/83-06) found that due to deficiencies observed by an inspector in a training class "...close supervision/auditing of contracted training will be necessary to ensure a consistent high level of training is achieved." Although MP&L identified several mechanisms in place which are intended to evaluate the quality of training provided by Quadrex, it appears that their auditing and supervision is inadequate due to the present lack of qualified MP&L staff. Three MP&L people were identified by the licensee who are designated to perform audit functions on Quadrex training, only two of which were SRO licensed. One of these licensed individuals however, did not recall sitting in on classes conducted by Quadrex or reviewing quizzes or examinations. MP&L's intention of relieving some of the administrative burdens on the Training Superintendent and filling the Operations Training Supervisor's vacancy should help to relieve this problem.

The requirement that instructors who teach systems, integrated plant response, transients and simulator courses demonstrate their competence by successful completion of an NRC SRO examination is contained in NUREG-0737, GGNS FSAR Section 13.2.1.1.8 and internal Grand Gulf procedures. Twelve of the current 18 Quadrex instructors were previously licensed at other BWR facilities. The remaining six are either RO licensed or SRO certified by GE. Nine of the previously licensed Quadrex instructors were scheduled to take the NRC SRO examination during the week of December 5, 1983. This certification requirement was based on letters from D. H. Beckham, Chief Operator Licensing Branch, NRR to MP&L dated September 15, 1982 and October 15, 1982. This correspondence exchange took place before the contract was awarded to Quadrex and therefore, before the credentials of their instructors were identified. The NRC has historically interpreted the NUREG-0737 instructor certification to not require re-examination of people who hold or have held SRO licenses on comparable facilities. MP&L, therefore, questioned the necessity for the NRC December exams of the Quadrex instructors. MP&L intends to conduct their own certification exams

prior to the above date. This item was subsequently resolved with the licensee in a meeting held on November 18, 1983, in the NRC Regional office. The NRC stated at that meeting that individuals who have held SRO licenses on comparable facilities need not complete the NRC instructor certification if these individuals are involved in a requalification training or an equivalent program.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

JAN 13 1984

Mississippi Power and Light Company  
ATTN: Mr. J. B. Richard  
Senior Vice President, Nuclear  
P. O. Box 1640  
Jackson, MS 39205

Gentlemen:

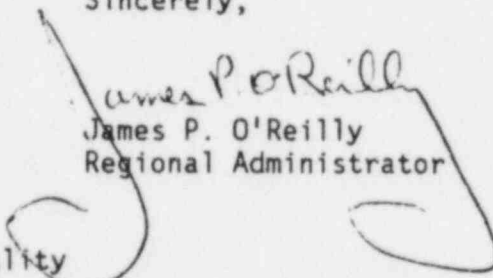
SUBJECT: INSPECTION OF THE GGNS TRAINING PROGRAM

We have reviewed the information provided in your letter of January 9, 1984. This letter relates to the return to duty of three operators which were removed from shift assignment by MP&L.

We concur in your actions based on our continuing review of your recertification program.

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

  
James P. O'Reilly  
Regional Administrator

cc: Ralph T. Lally, Manager of Quality  
Middle South Services, Inc.  
J. E. Cross, Plant Manager

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~~8401240214~~

Lp.

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Reading

-MAR 06 1984

Tennessee Valley Authority  
ATTN: Mr. H. G. Parris  
Manager of Power  
500A Chestnut Street Tower II  
Chattanooga, TN 37401

Gentlemen:

SUBJECT: REPORT NOS. [REDACTED]

On January 31 - February 3, 1984, NRC inspected activities authorized by NRC Construction Permit Nos. CPPR-91 and CPPR-92 for your [REDACTED]. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report. The NRC's concerns relative to the inspection findings were also discussed by Mr. J. A. Olshinski, of this office and Mr. W. T. Cottle, Plant Superintendent, of your office, in a management meeting held at NRC Region II Office on February 8, 1984.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements and other activities appeared to deviate from a commitment to the NRC. The violation and deviation, with pertinent references and elements to be included in your response, are presented in the enclosed Notices.

In addition to the need for corrective action regarding the specific matters identified in the enclosed Notices, we are concerned about the implementation of your management control systems that permitted this situation to develop. Consequently, your response should describe those particular actions taken or planned to improve the effectiveness of your program.

Your attention is invited to unresolved items identified in the inspection report. These matters will be pursued during future inspections.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained therein, please notify this office by telephone and include a written application to withhold information in your response. Such application must be consistent with the requirements of 2.790(b)(1).

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~~8407180020~~  
2pp

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MAR 06 1984

Tennessee Valley Authority

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The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Richard C. Lewis, Director  
Division of Project and  
Resident Programs

Enclosures:

1. Notice of Violation
2. Notice of Deviation
3. Inspection Report Nos. 50-390/84-11  
and 50-391/84-11

cc w/encls:

J. A. Coffey, Director of Nuclear Power  
W. T. Cottle, Plant Superintendent  
G. Wadewitz, Project Manager  
R. M. Pierce, OEDC Project Manager  
J. W. Anderson, Manager  
Office of Quality Assurance  
H. N. Culver, Chief, Nuclear Safety  
Review Staff  
D. L. Williams, Jr., Supervisor,  
Licensing Section  
R. E. Teamer, Project Engineer

bcc w/encls:

NRC Resident Inspector  
Document Control Desk  
State of Tennessee

RII *for*  
BTDebs:sa  
02/16/84

RII *BAW*  
BAWilson  
02/17/84

RII *BAW for*  
AFGibson  
03/5/84

RII *Walt*  
JAOlshinski  
02/15/84

RII *Q*  
JMPuckett  
03/5/84

RII *RC*  
RCarroll  
03/2/84

RII *CA*  
CAJulian  
02/1/84  
3/5/84

RII *ed for*  
PFredrickson  
02/1/84  
3/5/84

RII *DM*  
DMVerrelli  
03/5/84

RII *RC*  
RCLewis  
03/5/84

A46

ENCLOSURE 1

NOTICE OF VIOLATION

Tennessee Valley Authority  
Watts Bar

Docket Nos. 50-390 and 50-391  
License Nos. CPPR-91 and CPPR-92

The following violation was identified during an inspection conducted on January 31 - February 3, 1984. The Severity Level was assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

10 CFR 50, Appendix B, Section V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Revision 4 of the Watts Bar Training Instruction Letter, section 11, requires that the responsible shift engineer will be responsible for certifying that each cold license candidate in his crew has satisfactorily completed the systems walk-through requirements and that the shift engineer will complete walk-through examinations and forward them to the Operations Supervisor.

Contrary to the above, plant system familiarization walk-throughs were not performed in accordance with the established plant instruction.

This is a Severity Level IV (Supplement II).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: \_\_\_\_\_

~~8407180026~~ LP

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ENCLOSURE 2

NOTICE OF DEVIATION

Tennessee Valley Authority  
Watts Bar

Docket Nos. 50-390 and 50-391  
License Nos. CPPR-91 and CPPR-92

Based on the results of the NRC inspection conducted on January 31 - February 3, 1984, certain of your activities appear to deviate from your commitments to the Commission as indicated below:

Watts Bar Final Safety Analysis Report 13.2.3.2 states, in part, that records supporting requests for NRC senior operator and operator licenses are maintained in the Watts Bar master files. These records include training courses attended, retraining classes, number of reactor startups, and other information necessary to insure that training requirements have been met.

Contrary to the above, documentation of test reactor startups and two familiarization system walk-through completion sheets were unavailable for reactor operator license application docket number 20161. System break-in sheets and Nuclear Operator Training Program tests were not available for reactor operator application docket number 20163. Documentation of health physics training for September 1982 and 16 hours of fuel receipt training between July 1978 and December 1982 were not available for docket number 8547.

~~8407180030~~

LP

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

MAR 06 1984

Report Nos.: 50-390/84-11 and 50-391/84-09

Licensee: Tennessee Valley Authority  
500A Chestnut Street  
Chattanooga, TN 37401

Docket Nos.: 50-390 and 50-391

License Nos.: CPPR-91 and CPPR-92

Facility Name: Watts Bar

Inspection at Watts Bar site near Spring City, Tennessee

Inspectors:

B. T. Debs

2/20/84  
Date Signed

R. Carroll

3/2/84  
Date Signed

Approved by:

C. A. Julian  
C. A. Julian, Section Chief

3/5/84  
Date Signed

Operational Program Branch

Division of Engineering and Operational Programs

#### SUMMARY

Inspection on January 31 to February 3, 1984

#### Areas Inspected

This special, announced inspection involved 48 inspector-hours on site in the area of information verification on NRC Form 398 (Personal Qualification Statement - License Application).

#### Results

Of the area inspected, one apparent violation and one apparent deviation were found.

~~8407180035~~ 8pp.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*W. T. Cottle, Plant Superintendent
- \*H. J. Voiles, Training Supervisor
- \*R. T. McCollom, Nuclear Power Compliance
- \*W. L. Byrd, Nuclear Power Compliance
- \*J. F. Bledsoe, OQAB - Watts Bar TVA
- \*J. Inger, OQAB - Watts Bar TVA

Other licensee employees contacted included four operators and two security force members.

#### NRC Resident Inspectors

- \*M. Shymlock, Senior Resident Inspector
- \*W. Holland, Resident Inspector

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on February 3, 1984, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in section 5.b.

### 5. Verification of Information on NRC Form 398 (Personal Qualification Statement - License Application)

The inspection consisted of an indepth review of three NRC 398 Forms for two reactor operator (RO) applicants and one senior reactor operator (SRO) applicant which are currently on file at the NRC Region II office. These

NRC 398 forms have been assigned Docket Numbers 20161(R0), 20163(R0) and 8547(SR0) respectively. The following subsections highlight the findings of this special inspection:

a. Availability of Records

In the dockets that were reviewed, documentation supporting some items of the training/experience used to complete NRC Form 398 could not be retrieved. The following are examples of this lack of documentation:

- (1) 20161(R0) - The inspectors observed that documentation for 40 hours of test reactor operations, which included 10 reactor startups, was not available onsite. Only a request for the aforementioned training at the Oak Ridge National Laboratory for December 8 - 12, 1980 could be found in the candidate's training records. A search by the licensee in the training records associated with other individuals also identified on the request, did not produce documentation of this training. The licensee contacted Oak Ridge National Laboratory and received a commitment from them to provide the necessary documentation to support the actual test reactor training.
- (2) 20163 (R0) - Inclusive documentation was not available to substantiate that the applicant received the training of the Nuclear Operator Training Program (NOTP) that was taken credit for on the NRC Form 398. Most of the TVA training summary sheets (1453(s)) for the NOTP were missing as well as actual tests and break-in system qualification sheets that should have been associated with this training. The licensee produced some documentation which indicated the applicant passed the Auxiliary Unit Operator (AUO) exam, for which the satisfactory completion of the NOTP should have been a prerequisite.
- (3) 20161 (R0) - Two familiarization system walk-through completion sheets for "Spent Fuel Cooling" and "CO<sub>2</sub> storage, Fire Protection and Purging" were not available to determine if a walk-through on these systems had been performed by the applicant.
- (4) 8547(SR0) - Documentation supporting the health physics training received in September 1982, which was included under "Nuclear Power Plant Fundamentals" on NRC Form 398, could not be found by the inspectors or the licensee.
- (5) 8547(SR0) - Under "Plant Systems Observation", 24 hours of fuel receipt training and inspection (7/78-12/82) were included. The licensee could only provide documentation to substantiate eight hours of this training.



Watts Bar Final Safety Analyses Report (FSAR) Section 13.2.3.2 states that "Records supporting requests for NRC senior operator and operator licenses are maintained in the Watts Bar master files. These records include training courses attended, retraining classes, number of reactor startups, and other information necessary to ensure that training requirements have been met." Contrary to this, as seen in examples 5.a.(1)-(5) above, records supporting requests for NRC SRO and RO licenses were not onsite in the Watts Bar master files. This lack of onsite supporting documentation is considered a deviation (Dev. 50-390/84-11-01, 50-391/84-09-01).

b. Accounting for Training/Experience on NRC Form 398

The following are examples of inconsistencies the inspectors observed in the licensee's accounting for applicants' training/experience on NRC Form 398.

- (1) 8547(SRO) - Under "Nuclear Power Plant Fundamentals," the applicant was credited with 475 hours for completing a basic nuclear fundamentals course during the time frame of November 1976 through January 1977. However, the associated TVA Form 1453 documented only 464 hours. This difference of 11 hours could not be accounted for by the licensee.
- (2) 8547 (SRO) - A review of the applicant's applicable TVA Form 1453 revealed that 400 hours of plant systems training documented on his NRC Form 398, had been received while he was at Browns Ferry. The system topics listed on the TVA Form 1453 indicated that the systems training was structured towards boiling water reactors. The inspectors informed plant management that it could be appropriate to take credit for some of this training if a correlation could be demonstrated with pressurized water reactor systems. At the time of the inspection, the licensee was unable to demonstrate a definitive correlation.

It was further observed that the TVA Form 1453, which documented this 400 hour plant systems training course, also included the 464 hour basic nuclear fundamentals course discussed in 5.b.(1) above. The form indicated that both of these courses (approximately 22 weeks), took place during the time frame of November 1976 through January 1979. The licensee was unable to explain how 864 hours could be given in less than a three month period.

- (3) 8547(SRO) - 40 hours of simulator refresher training taken in November 1982 was credited to the NRC Form 398 as "Simulator Operating Practice." The applicable TVA Form 1453 indicated that the applicant satisfactorily completed the course. The written examination coversheet for this training indicated that the candidate received a grade of 65%. Licensee management expressed that the satisfactory completion indicated on the TVA form 1453 represents an overall performance evaluation which includes both

the written examination and simulator performance; the latter apparently compensating for the written exam grade of 65%.

- (4) 8547(SRO), 20161(RO) and 20163(RO) - In all three cases, a TVA onsite training course was used, in part, as credit for plant systems observation. However, the associated TVA form 1453 did not indicate that any system observation was performed. At the time of the inspection, the licensee could not produce supportive documentation.
- (5) 20161(RO) and 20163(RO) - In both cases, onsite group training courses (May 1982 - June 1983) were used as credit for "Simulator Operating Practice." The inspectors were unable to determine from the TVA 1453 forms that the simulator was utilized as a method of instruction for this course.

In addition, one RO candidate (20161) was credited with 120 hours of training during this time frame. The two associated TVA 1453 forms indicated only 112 hours accumulative time. The licensee could not explain this difference of 8 hours between the TVA 1453 forms and the NRC Form 398.

- (6) 8547(SRO), 20161(RO) and 20163(RO) - Under Item #7 of the three NRC 398 forms, an 8 hour course in dynamics of two-way communications was listed as one half (.5) of a week, (i.e. 20 hrs). In addition, NRC 398 forms 20161(RO) and 20163(RO), also contained similar discrepancies for a human relations seminar.
- (7) 20161(RO) and 20163(RO) - A review of the Watts Bar training instruction letter indicated that thermodynamics and mitigation of core damage was incorporated into the simulator certification training as of April 1980. The inspectors reviewed two RO candidates' TVA 1453 forms which documented their completion of post 1980 simulator certification training. It could not be determined from the TVA 1453 forms, that training in mitigation of core damage was included as subject matter. The licensee presented an internal memo dated July 16, 1981, which indicated such, but was unable to provide conclusive documentation at the time of the inspection. This item will be considered an inspector followup item until verification of training can be obtained by a review of training syllabuses (IFI 50-390/84-11-02, 50-391/84-09-02).

The aforementioned item numbers 5.b.(1), (2), (4), (5) and (6) represent examples of inaccuracies or inconsistencies which require resolution by the licensee. Since these items may represent false information on operator license applications, they will be considered an unresolved item until thoroughly reviewed by the NRC Region II office (URI 50-390/84-11-03, 50-391/84-09-03).

c. Plant Familiarization Walk-Throughs

Revision 4 of the Watts Bar Training Instruction Letter, Section 11, requires that the shift engineer will be responsible for certifying that each cold license candidate in his crew has satisfactorily completed the systems walk-through requirement. Furthermore, the shift engineer will complete walk-through examinations and forward them to the Operations Supervisor. The performance on each system walk-through is documented on attachment 11.B to the aforementioned instruction letter. The inspectors reviewed those attachment 11.B(s) contained in candidate's training records for docket numbers 8547(SRO), 20161(RO) and 20163(RO).

The inspectors observed that for docket number 8547(SRO), one of the system walk-throughs had been signed by the shift engineer but the evaluation section of the form had not been completed. It was further observed that the dates of two walk-throughs were not consistent with when the shift engineer had been on-site. The inspectors conducted an interview with the candidate who had received the apparent walk-throughs. The candidate indicated that the shift engineer who signed the forms had given the individual the walk-throughs. The candidate also indicated that the individual receiving the walk-through completes all sections of the form, (including the evaluation section), except for the shift engineer's signature. An interview was held with the shift engineer who signed the forms. The shift engineer indicated that, for the most part, he does not conduct the walk-throughs. Somebody qualified on the system usually administers the walk-through and, on occasion, the student may give himself a walk-through. The shift engineer is usually presented with numerous completed walk-through forms which he then signs with the assumption that the tasks have been completed since the forms are presented with the necessary information filled in. The SRO candidate (8547) later informed the inspectors that his earlier statements were in error and that the walk-throughs were conducted as the shift engineer had stated.

As previously identified in item 5.a.(3), the recorded walk-through forms associated with docket number 20161(RO) were incomplete in that walk-through forms were missing for the spent fuel pit cooling and carbon dioxide storage, fire protection and purgin systems. For both the aforementioned applicants, the TVA 1453 forms indicated that the plant system walk-throughs listed in training instruction letter, section 11.0, were completed during a four week period. This four week walk-through was credited to the applicants' respective NRC Form 398 under "Plant Systems".

The inspectors expressed concern to plant management that plant procedural compliance and the accuracy of information relating to this area of training appeared to be weak. Plant management acknowledged the inspectors' concerns.

10 CFR 50, Appendix B, Section V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to this, the familiarization walk-throughs were not performed in accordance with established plant instructions and is, therefore, considered a violation of Appendix B to 10 CFR 50 (VIO 50-390/84-11-04, 50-391/84-09-04).

d. Independent Review of NRC Form 398

An inspector informed licensee management that no apparent independent review of NRC 398 Forms had been performed by licensee personnel to assure accuracy of information. Licensee management acknowledged the inspector's observation and concluded that some form of independent verification should be performed. Licensee action regarding this item will be inspected during subsequent inspections (IFI 50-390/84-11-05, 50-391/84-09-05).

7. Management Meeting

A meeting was held at the request of the licensee, on February 8, 1984, in the NRC Region II Office in Atlanta, GA, to discuss corrective actions planned by TVA in response to this inspection.

Meeting Attendance was as follows:

Licensee Employees

W. T. Cottle, Plant Superintendent (WBNP)  
E. R. Ennis, Assistant Plant Superintendent (WBNP)  
R. Shell, Supervisor PWR Projects (TVA)  
C. H. Noe, Supervisor Operational Training (TVA)

U. S. Nuclear Regulatory Commission, Region II

R. C. Lewis, Director, Division of Project and Resident Programs  
J. A. Olshinski, Director, Division of Engineering and Operational Programs  
D. M. Verrelli, Chief, Project Branch No. 1  
C. A. Julian, Chief, Section 1A Division of Project and Resident Programs  
B. Wilson, Chief, Operator Licensing Section  
A. F. Gibson, Chief, Operational Programs Branch  
M. Shymlock, Senior Resident Inspector, WBNP  
W. Holland, Resident Inspector, WBNP  
R. Carroll, Project Inspector  
B. Debs, Region II Inspector



Region II NRC representatives discussed the conduct of reactor operator and senior reactor operator candidate training and the accuracy of information which has been provided on NRC 398 Forms with licensee management representatives.

Region II NRC representatives informed licensee management of the violation, deviation, unresolved item, and inspector follow-up items contained in the text of the inspection report which had previously been identified as unresolved items at the time of the inspection exit interview.

Commitments made by TVA during this meeting were confirmed in a letter from Mr. James P. O'Reilly, Administrator, Region II, to Mr. H. G. Parris, TVA Manager of Power, dated February 10, 1984.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

MAR 23 1984

Mississippi Power and Light Company  
ATTN: Mr. J. B. Richard  
Senior Vice President, Nuclear  
P. O. Box 1640  
Jackson, MS 39205

Gentlemen:

SUBJECT: CONFIRMATION OF ACTION - DOCKET NO. 50-416

This letter refers to the telephone conversations on March 20, and March 23, 1984, between Mr. A. F. Gibson of this office and Mr. J. E. Cross, Plant Manager, Grand Gulf Nuclear Station, concerning the results of the licensed operator and senior operator NRC simulator requalification examinations conducted at the Grand Gulf Nuclear Station on March 12, 1984.

Based upon the matters discussed, it is our understanding that the following actions have been or will be taken:

1. The three operators who failed their second NRC simulator requalification examination administered on March 12, 1984, are still prohibited from performing licensed duties. They will not be returned to licensed duties until they have satisfactorily completed an NRC administered simulator requalification examination. These three individuals are identified by license number in Enclosure 1.
2. You will provide to this office by April 16, 1984, in writing, a summary of the remedial training you intend to provide these three individuals and its scheduled completion date.
3. Additionally, you will evaluate the remainder of the GGNS Licensed Operator Staff to determine if the deficiencies exhibited by these three individuals are applicable to others on the staff. The results of this evaluation and any training program improvements will be provided to this office, in writing, by April 16, 1984.

If your understanding of our discussion is different from that stated above, please inform this office promptly.

Sincerely,

*James P. O'Reilly*  
James P. O'Reilly  
Regional Administrator

CAL 50-416-8402

Enclosure. License Numbers

cc w/encl:

J. Cross, Plant Manager

~~84040-10137~~ 4PP

149



MAR 23 1984

Mississippi Power and Light Company  
ATTN: Mr. J. B. Richard  
Senior Vice President, Nuclear  
P. O. Box 1640  
Jackson, MS 39205

Gentlemen:

SUBJECT: CONFIRMATION OF ACTION - DOCKET NO. 50-416

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If your understanding of our discussion is different from that stated above, please inform this office promptly.

Sincerely,

James P. O'Reilly  
Regional Administrator

CAL 50-416-8402

Enclosure: License Numbers

cc w/encl:  
J. E. Cross, Plant Manager

bcc w/o encl: (See page 2)

A49

MAR 23 1984

Mississippi Power and Light Company  
CAL-50-416-8402

2

bcc w/o encl:  
NRC Resident Inspector  
Document Control Desk  
State of Mississippi

RII

AFGibson:11  
03/ /84

RII

JA0ishinski  
03/ /84

*03/27/84*

RCI

~~RD/actin  
03/ /84~~

A49

ENCLOSURE

License No.

OP-5854  
OP-6121  
OP-4216



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

Debs

APR 4 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: DOCKET NOS. 50-413 AND 50-414

Thank you for your letter of March 14, 1984, informing us of the actions which you are taking to correct deficiencies in the operator training program at the Catawba Nuclear Station. We have evaluated the corrective action commitments provided by your letter and found them to be acceptable. Implementation of these corrective actions will be examined during future inspections.

We appreciate your cooperation in this matter.

Sincerely,

*James P. O'Reilly*  
James P. O'Reilly  
Regional Administrator

cc: J. W. Hampton, Station  
Manager

*he said acceptable  
not comprehensive*

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

APR 12 1984

Debs

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NO. 50-413/84-39

On March 28-30, 1984, NRC inspected activities authorized by NRC License No. DPPR-116 for your Catawba facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Within the scope of the inspection, no violations or deviations were identified.

Your attention is invited to unresolved items identified in the inspection report. These matters will be pursued during future inspections.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in NRC's Public Document Room unless you notify this office by telephone within ten days of the date of this letter and submit written application to withhold information contained therein within 30 days of the date of the letter. Such application must be consistent with the requirements of 2.790(b)(1).

Should you have any questions concerning this letter, please contact us.

Sincerely,

*R.C. Lewis*  
Richard C. Lewis, Director  
Division of Project and  
Resident Programs

Enclosure:  
Inspection Report No. 50-413/84-39

cc w/encl:  
R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

APR 12 1984

Report Nos.: 50-413/84-39

Licensee: Duke Power Company  
422 South Church Street  
Charlotte, NC 28242

Docket No.: 50-413

License No.: CPPR-116

Facility Name: Catawba 1

Inspection at Catawba site near Rock Hill, South Carolina

Inspector:

*[Signature]*  
for T. Debs

11 APR 84  
Date Signed

Approved by:

*[Signature]*  
H. Krug, Acting, Section Chief  
Operational Program Branch  
Division of Reactor Safety

11 APR 84  
Date Signed

SUMMARY

Inspection on March 28-30, 1984

Areas Inspected

This routine, announced inspection involved four inspector-hours on site in the area of Licensee completed NRC Form-398(s).

Results

No violations or deviations were identified in the area inspected.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*C. W. Graves, Superintendent of Operations
- S. Frye, Director of Operator training
- W. Barron, Training Supervisor
- \*G. Barrett, Training Supervisor

Other licensee employees contacted included one operator.

#### NRC Resident Inspectors

- \*P. A. Skinner, Senior Resident Inspector (Operations)
- \*P. K. VanDoorn, Senior Resident Inspector (Construction)

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on March 30, 1984, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in section 5.

### 5. Licensee Completed NRC Form 398(s)

The inspector performed a review of selected NRC Form 398(s), "Personal Qualifications Statement - Licensee" submitted by the licensee to the NRC in March 1984.

The inspector observed that the NRC Form 398 for Docket Number 55-6427 reflected a period of Cold License Certification Observation training during May 1978, a period of four weeks. The inspector reviewed the candidate's Cold License Certification Observation Task List which should have been completed during this period. This list contained task completion dates ranging from January 1975 to July 1978, a period of three and one half years rather than the indicated four weeks.

Licensee management indicated that the candidate had been provided this task list to complete at the Oconee Nuclear station prior to his employment at the Catawba Nuclear Station. The candidate had been a licensee Reactor Operator (License No. OP-4798) at the Oconee Nuclear Station. His date of initial employment at Catawba is July 31, 1978.

NRC Form 398 for Docket Number 20270 indicates that during the four weeks in September 1981 the candidate completed his Cold License Certification Observation Training. A review of this candidate's training records indicate that the observation task list was completed during a period from March 1982 to June 1982. Licensee personnel indicated that this inaccuracy was a result of a clerical error when the applications were being completed.

NRC Form 398 for Docket Number 20256 indicates that four weeks of Cold License Certification Observation Training had been completed from January 1982 to June 1982. A review of the candidates training records indicated that the four weeks of this observation training had been performed in March 1980. The licensee indicated that this inaccuracy was a result of a clerical error while completing the application.

The inspector informed licensee management that these apparent inaccuracies will be further evaluated by the NRC Region II Office. Since these items may represent a violation of 10CFR, they will be considered an unresolved item until the NRC has completed an evaluation (URI 50-413/84-39-01).

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# INSPECTOR'S REPORT (Continuation) of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER			
		NO.	SEQ.				
			A	VIOLATION SEVERITY OR DEVIATION		SITE RELATED	
			B	1	2	3	4
			C	5	6		
			D				

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

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84-39-01

NRC FORM 398 / NUCLEAR 1 ES

ITEM NUMBER					

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

*Helio*

APR 18 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-413/84-25 AND 50-414/84-10

On February 21-23, 1984, NRC inspected activities authorized by NRC Construction Permit Nos. CPPR-116 and CPPR-117 for your Catawba facility. At a March 8, 1984, meeting held at the NRC Region II Office and again on March 26, 1984, at the Catawba facility, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements and other activities appeared to deviate from a commitment to the NRC. The violation and deviation, with pertinent references and elements to be included in your response, are presented in the enclosed Notices.

In addition to the need for corrective action regarding the specific matters identified in the enclosed Notices, we are concerned about the implementation of your management control systems that permitted this situation to develop. Consequently, your response should describe those particular actions taken or planned to improve the effectiveness of your program.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained therein, please notify this office by telephone and include a written application to withhold information in your response. Such application must be consistent with the requirements of 2.790(b)(1).

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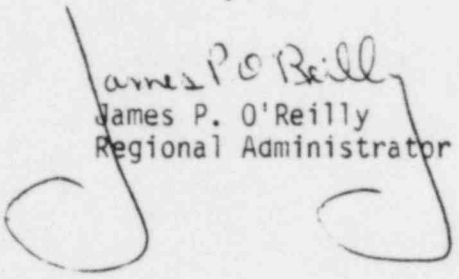


APR 18 1984

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

  
James P. O'Reilly  
Regional Administrator

Enclosures:

1. Notice of Violation
2. Notice of Deviation
3. Inspection Report Nos.  
50-413/84-25 and 50-414/84-10

cc w/encls:

R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

A52 .

ENCLOSURE 1

NOTICE OF VIOLATION

Duke Power Company  
Catawba Nuclear Station

Docket Nos. 50-413 and 50-414  
License Nos. CPPR-116 and CPPR-117

The following violation was identified during an inspection conducted on February 21-23, 1984. The Severity Level was assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

10 CFR 55.10(d) requires that each application and statement shall contain complete and accurate disclosure as to all matters and things required to be disclosed.

10 CFR 55.10(a)(6) requires certification that the applicant has learned to operate the controls in a competent and safe manner and has need for an operator or senior operator license. This certification may be provided by an authorized representative of the facility licensee where the applicant's services will be utilized. The certification must include details on courses of instruction administered by the facility licensee, number of course hours, and the number of hours of training received at the facility.

Contrary to the above, in 11 instances inaccurate information was submitted by Duke Power Company as part of the required certification in February 1984 on applications for operator and senior operator licenses at the Catawba facility. However, if the correct information had been known at the time of the submittal, the license eligibility of the individual applicants would not have been affected.

This is a Severity Level IV Violation (Supplement I).

Fursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: APR 18 1984

~~8407020454~~

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ENCLOSURE 2

NOTICE OF DEVIATION

Duke Power Company  
Catawba Nuclear Station

Docket Nos. 50-413 and 50-414  
License Nos. CPPR-116 and CPPP-117

The following deviation was identified during an inspection conducted on February 21-23, 1984.

Catawba Nuclear Station Final Safety Analysis Report Section 13.2.2.2.2(k) states, in part, that the cold certification observation check list provides structured guidance for required observation tasks.

Contrary to the the above, in 13 instances, cold certification observation check lists were not documented as completed for operator license candidates.

Please provide, in writing within 30 days of the date of this Notice, a description of corrective actions regarding this deviation, actions taken to avoid further deviations, and the dates when these actions were or will be completed.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: APR 18 1984

~~8407020462~~

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

APR 18 1984

Report Nos.: 50-413/84-25 and 50-414/84-10

Licensee: Duke Power Company  
422 South Church Street  
Charlotte, NC 28242

Docket Nos.: 50-413 and 50-414

License Nos.: CPPR-116 and CPPR-117

Facility Name: Catawba

Inspection at Catawba site near Clover, South Carolina

Inspector: Bruce A. Wilson, for 3/29/84  
B. T. Debs Date Signed

Approved by: Bruce A. Wilson 3/29/84  
B. Wilson, Section Chief Date Signed  
Operational Program Branch  
Division of Engineering and Operational Programs

SUMMARY

Inspection on February 21 - 23, 1984

Areas Inspected

This routine, unannounced inspection involved 17 inspector-hours on site in the areas of NRC Form 398 accuracy, cold certification observation training, quality assurance evaluation of operator training programs, simulator training, and procedure walk-throughs.

Results

Of the five areas inspected, no violations or deviations were identified in three areas; one apparent deviation was found in one area and one apparent violation was found in another area.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- J. W. Hampton, Station Manager
- G. G. Barrett, Training Supervisor
- \*C. W. Graves, Superintendent of Operations
- W. Barron, Senior Instructor Operator Training
- J. Knuti, Operating Engineer
- J. W. Willis, Senior QA Engineer
- \*S. Frye, Director of Operator Training

Other licensee employees contacted included two operators and two office personnel.

#### NRC Resident Inspectors

- P. H. Skinner
- K. Vandorn

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on March 8, 1984, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Accuracy Of Information Provided On NRC Form 398 (Personal Qualifications Statement - Licensee)

The inspector performed an indepth review of two cold license applications, NRC Form 398(s), a cursory review of six other applications, and a review of a licensee performed Quality Assurance Audit of applications which was submitted by the licensee to the NRC Region II Office. The following describes the discrepancies associated with these applications:

- a. NRC Form 398 for Docket Number 20258 indicates that the candidate completed 30.6 weeks of plant systems training. The inspector observed that a 13 week segment of that training, "Systems Procedures Specific", included one week of fire brigade training and one day of physical

examinations. The inspector informed licensee management that the time relating to nonsystems training or activities cannot appropriately appear in the plant system section of the NRC Form 398 and that such incorporation results in an apparent over statement of a specific training. Licensee management acknowledged the inspector's comments and subsequently corrected the application.

- b. The inspector observed that the data presented on the applications was obtained from a computer generated printout of each candidate's training. This printout provides the licensee with course titles, dates of course completion, and total course hours. In completing the NRC Form 398 applications, licensee personnel had taken the dates of course completion and back calculated the number of course hours to derive a start date. The inspector reviewed the training summary sheets and attached training information which the licensee had originally used to input the data into the computer. It was noticed that these summary sheets include a list of attendees for each course but did not include a daily attendance record of the candidates. Licensee representatives stated that 100 percent attendance was assumed when calculating the times which were represented on the NRC Form 398(s). The inspector stated that in order to complete license applications accurately, periods of nonattendance as result of vacations, sickness, etc. must be discounted. Licensee management acknowledged this deficiency and subsequently corrected the applications.

- c. The plant's Quality Assurance Group had performed a post submittal surveillance of 9 of the 31 submitted license applications. The inspector reviewed a draft report of this surveillance. The surveillance indicated that the NRC Form 398 for Docket Number 20277 reflected 54.1 weeks of plant systems classroom training. Training records document 29.7 weeks of this type training. 14.8 weeks of simulator operations training also appeared on this application. Training records document 12.8 weeks of simulator training.

NRC Form 398 for Docket Number 20275 reflects 20 weeks of observation training. However, training records document 16 weeks.

The NRC Form 398 for Docket Number 20280 reflects 17.6 weeks of plant systems observation training. Training records document 14.6 weeks. 28.2 weeks are credited to SRO instruction. Site QA could find documentation substantiating 27.5 weeks of this training.

The Quality Assurance surveillance also identified six inaccuracies associated with the periods of training reported on submitted NRC Form 398(s). Site QA further observed that course number MC-6200 had been credited as a nuclear fundamental course on one application and as a systems course on another application.

- d. The inspector's review of selected training records indicated that a requisite cold license certification observation checklist was incomplete in that item number 5 on page 5 of the checklist had not been completed for Docket Number 20254.



For Docket Number 20277 a required observation training item also had not been completed on page 5 of the cold license certification observation checklist. The inspector also noted that the check lists contained multiple performances, observations, or discussions listed under a single topic item. In some cases a single date and set of initials appeared next to the topic item or a single subtopic. In other instances each subtopic had been initialed and assigned a date. The licensee was unsure if all the subtopics had been performed in the cases where only one date and set of initials appeared. Observation training is further discussed in section 6 of this report.

Subsequent to the inspection, the licensee withdrew their NRC Form 398 submittal and performed a complete audit of the information contained on these applications. The licensee discovered additional inaccuracies. The NRC Form 398(s) were resubmitted to the NRC at a March 8, 1984 meeting described in Section 10 of this report. On March 26, 1984, the inspector informed licensee management that the inaccuracies in prior submittals of NRC Form 398(s) represent a violation of 10 CFR 55.10(d) which requires, in part, that each application and statement shall contain complete and accurate disclosure as to all matters and things required to be disclosed; and 10 CFR 55.10(a)(6) which requires, in part, certification that the applicant has learned to operate the controls in a competent and safe manner. This certification may be provided by an authorized representative of the facility licensee where the applicant's services will be utilized. The certification must include details on courses of instructions administered by the facility licensee, number of course hours, and the number of hours of training received at the facility.

Additionally, the licensee was informed that had the NPC known the correct information at the time of the submittals, the license eligibility of the individuals applicants would not have been affected in the eyes of the NPC (VIO 50-413/84-25-01, 50-414/84-10-01).

#### 6. Cold Certification Observation Training

Section 13.2.2.2.2(k) of the plant's Final Safety Analysis Report (FSAR) Revisions C through 7, states, in part, that the cold certification observation check list provides structured guidance for required observation tasks. This checklist appeared as an attachment to a cold certification program request to Mr. Paul F. Collins, NRC (OLB) from Duke Power Company dated November 2, 1977 and subsequently accepted by Mr. Collins' letter dated November 28, 1977. This observation checklist contains tasks which are identified by a single or double asterisk. The double asterisk identifies tasks which are required to be completed by a reactor or senior reactor operator condidate. The single asterisk is used to identify tasks that could have a significant impact on the candidates performance during future training but are not required to be completed.

As is stated in section 5.(d) of this report, two instances of required double asterisk items were observed not to be complete. Subsequent to this inspection, the licensee identified eleven additional double asterisk tasks which had not been completed. The licensee was informed that the thirteen instances of incomplete observation training represents a deviation by the licensee from a commitment to the NRC to perform those observations. (DEV 50-413/84-25-02, 50-414/84-10-02).

In addition to the aforementioned basic observation checklist, the licensee had expanded that checklist to include other observation, performance and discussion items which included 68 licensee identified systems. From training records, the inspector observed that very few of these additional tasks had been completed by the candidates. Interviews conducted with licensee training personnel and operator candidates indicated that these additional tasks were given to the candidates with the understanding that they were not required and could be performed if time permitted.

#### 7. Quality Assurance Evaluation of Operator Training Programs

Revisions 0 through 7 of the Catawba FSAR Section 13.2.5 states, in part, that the Quality Assurance Department audits the station training. Interviews conducted by the inspector with plant Quality Assurance (QA) personnel indicated that the plant QA group had recently completed their first surveillance, CN-84-11, on reactor and senior reactor operator training which included a review of the information provided on NRC Form 398(s). This surveillance was performed during the week prior to this NRC inspection and after the March 8, 1984, submittal of NRC Form 398(s) by the licensee.

The inspector reviewed the report of the last Departmental Audit, NP-84-2(CN), performed by members of the corporate office in January 1984. This audit included personnel qualifications and training along with record management. Site personnel were unsure if this audit specifically looked at reactor operator training. No negative findings could be found in the report regarding the area of personnel qualifications and training. The inspector informed licensee management that the depth of Quality Assurance audits should be such that any deficiencies including those which had been identified by the inspector in the operator training program including documentation are properly identified and corrected prior to the submittal of license applications to the NRC. The licensee's efforts to perform indepth surveillances of reactor and senior reactor operator training will be inspected during subsequent inspections (IFI 50-413/84-25-03, 50-414/84-10-03).

#### 8. Simulator Training

The inspector requested documentation regarding group sizes for Catawba simulator training programs. It was noted that from September 1983 through February 1984 group sizes had increased from three or four individuals to five and six. Revisions 0 through 7 of the Catawba FSAR Section 13.2.2.2(J) state, in part, that the simulator training sessions are normally conducted in groups consisting of four trainees per group. A52

The inspector informed licensee management that the quality of instruction may become diluted as the number in the group increases. The inspector expressed concern that the recent trend toward group sizes greater than four was becoming inconsistent with the aforementioned section of the FSAR. Licensee management acknowledged the inspector's concerns. This area of NRC concern will be inspected again during followup inspections (IFI 50-413/84-25-04, 50-414/84-10-04).

#### 9. Procedure Walk-Through

Revision 7 of the Catawba FSAR section 13.2.2.2(j) states, in part, that simulator training is supplemented with procedure "walk-through" training at Catawba Nuclear Station. The inspector observed that the licensee had established an informal task training list in April, 1983. This list consisted of numerous training tasks identified as complete by a date and a designated signature.

Licensee personnel indicated that the walk-throughs indicated on this list had not been completed by the candidates. Those items which had been completed were usually signed off by the students. Licensee management indicated that this list was only meant as a guide for the students and that actual formal, evaluated, and documented onsite walk-through training consisted of approximately ten full days of emergency procedures evaluation. The licensee further indicated that credit for walk-through training could be given candidates on the basis of undocumented participation in procedure development system tests, and the training opportunities which were provided to the candidates to go inplant and reinforce classroom training.

#### 10. Management Meeting

A meeting was held at the request of the licensee on March 8, 1984, in the NRC Region II Office in Atlanta, Georgia, to discuss corrective actions planned by Duke Power Company in response to this inspection.

##### Licensee Employees

S. R. Frye, Director of Operation Training  
C. W. Graves, Jr., Superintendent of Operations  
N. Rutherford, System Engineer, Licensing

##### U. S. Nuclear Regulatory Commission, Region II

H. C. Dance, Chief, Project Branch 2, Division of Project and Resident Programs  
V. L. Brownlee, Section Chief, Division of Project and Resident Programs  
A. Ignatonis, Project Inspector, DPRP  
B. A. Wilson, Chief, Operator Licensing Section  
B. T. Debs, Region II Inspector  
T. Rogers, Region II Examiner

Region II NRC representatives discussed the conduct of reactor operator and senior reactor operator candidate training, accuracy of information which has been provided on NRC 398 Forms, and the findings of the February 21-23, 1984 inspection with licensee management representatives.

Commitments made by Duke Power company during this meeting were confirmed by a Duke Power Company letter to the NRC Region II Office dated March 14, 1984.

Debs



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

MAY 04 1984

Tennessee Valley Authority  
ATTN: Mr. H. G. Parris  
Manager of Power and Engineering  
500A Chestnut Street Tower II  
Chattanooga, TN 37401

Gentlemen:

SUBJECT: REPORT NOS. 50-390/84-11 AND 50-391/84-09

Thank you for your response of April 9, 1984, to our Notices of Violation and Deviation issued on March 6, 1984, concerning activities conducted at your Watts Bar facility under Construction Permit Nos. CPPR-91 and CPPR-92. Regarding your response concerning the violation, you have indicated that TVA has complied with Item 3 of the Confirmation of Action Letter dated February 10, 1984, to Mr. H. G. Parris from Mr. James P. O'Reilly; however, the response does not directly address the implementation of Item 2 regarding this violation. Based on a telephone conversation on April 19, 1984, between an NRC representative, Mr. B. T. Debs, and a TVA representative, Mr. W. E. Teamer, it is our understanding that Item 2 has been implemented.

Regarding your response to the deviation, you disagreed with the inspection findings regarding Docket Number 20163 which stated that most of the TVA Forms 1453, tests, and break-in system qualification sheets were not available to substantiate Nuclear Operator Training Program (NOTP) training. Your response indicates that this phase of training is documented on a TVA Form 3031 rather than a TVA Form 1453; however, the response does not address the absent break-in system qualification sheets and tests. We are requesting that you provide a supplemental response specifically addressing these items.

We have evaluated your response to the violation and found that it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

We appreciate your cooperation in this matter.

Sincerely,

*Richard C. Lewis*

Richard C. Lewis, Director  
Division of Reactor Projects

cc: (See page 2)

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MAY 04 1984

cc: J. A. Coffey, Director of Nuclear  
Power  
W. T. Cottle, Plant Superintendent  
G. Wadewitz, Project Manager  
R. M. Pierce, OEDC Project Manager  
J. W. Anderson, Manager  
Office of Quality Assurance  
H. N. Culver, Chief, Nuclear Safety  
Review Staff  
D. L. Williams, Jr., Supervisor,  
Licensing Section  
R. E. Teamer, Project Engineer

A53



TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

84 APR 12 410 APR 19, 1984  
26

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - NRC-OIE REGION II INSPECTION REPORT  
50-390/84-11, 50-391/84-09 - RESPONSE TO VIOLATION (390,391/84-11,09-04)  
AND DEVIATION (390,391/84-11,09-01)

The subject inspection report cited TVA with one Severity Level IV  
Violation (390,391/84-11,09-04) and a Deviation (390,391/84-11,09-01) in  
accordance with 10 CFR 2.201. Enclosed is our response to the subject  
inspection report.

If you have any questions, please get in touch with R. H. Shell at FTS  
858-2688.

To the best of my knowledge, I declare the statements contained herein are  
complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*L. M. Mills*  
L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc (Enclosure):

Mr. Richard C. DeYoung, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Records Center  
Institute of Nuclear Power Operations  
1100 Circle 75 Parkway, Suite 1500  
Atlanta, Georgia 30339

~~8407180012~~ 4PP

1983-TVA 50TH ANNIVERSARY

An Equal Opportunity Employer

A53

ENCLOSURE  
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
NRC-OIE REGION II INSPECTION REPORT  
50-390/84-11 AND 50-391/84-09

~~REPORT OF VIOLATION AND DEVIATION~~

Severity Level IV Violation--50-390/84-11-04 and 50-391/84-09-04

10 CFR 50, Appendix B, Section V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Revision 4 of the Watts Bar Training Instruction Letter, section 11, requires that the responsible shift engineer will be responsible for certifying that each cold license candidate in his crew has satisfactorily completed the systems walk-through requirements and that the shift engineer will complete walk-through examinations and forward them to the Operations Supervisor.

Contrary to the above, plant system familiarization walk-throughs were not performed in accordance with the established plant instruction.

This is a Severity IV (Supplement II).

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for Violation if Admitted

The requirements of the Operations Section Letter, "Training," were not being strictly complied with.

Corrective Steps Which Have Been Taken and the Results Achieved

TVA has complied with Item 3 of the Confirmation of Action Letter dated February 10, 1984, to H. G. Parris from J. P. O'Reilly. Operator candidates scheduled for the April 1984 NRC examination have completed the walk-through examinations, and examinations for existing licensed operators and senior operators will be completed by June 1, 1984.

Corrective Steps Which Will Be Taken To Avoid Further Violations

The Operations Section Letter governing the walk-through examinations for cold license candidates has been revised to clarify the program. Future walk-throughs given to cold license candidates will be administered strictly by the section letter.

Date When Full Compliance Will Be Achieved

We will be in full compliance by June 1, 1984.

Deviation

Watts Bar Final Safety Analysis Report 13.2.3.2 states, in part, that records supporting requests for NRC senior operator and operator licenses are maintained in the Watts Bar master files. These records include training courses attended, retraining classes, number of reactor startups, and other information necessary to insure that training requirements have been met.

Contrary to the above, documentation of test reactor startups and two familiarization system walk-through completion sheets were unavailable for reactor operator license application docket number 20161. System break-in sheets and Nuclear Operator Training Program tests were not available for reactor operator application docket number 20163. Documentation of health physics training for September 1982 and 16 hours of fuel receipt training between July 1978 and December 1982 were not available for docket number 8547.

Corrective Actions That Have Been Taken Or Will Be Taken

Docket Number 20161--TVA asked for and received documentation of test reactor startups from Oak Ridge National Laboratory for the individual's record file. System walk-throughs on missing systems were conducted and placed in the applicant's file.

Docket Number 20163--TVA disagrees with the example cited in paragraph 5.a.2 of the report details. Form TVA 1453 is not the only form TVA uses to document the satisfactory completion of a training program. The Power Operations Training Center does not issue a form TVA 1453 to document completion of the Nuclear Operator Training Program (NOTP). NOTP training is documented at the completion of each period during the course by form TVA 3031, "Employee Service Report." This form is available onsite for the people completing the NOTP course.

Docket Number 8547--The 12 hours for the health physics course will be removed from the NRC Form 398, "Personal Qualifications Statement," before resubmittal. The 16 training hours for the fuel handling course will be removed from the applicant's NRC Form 398 before resubmittal.

Corrective Actions Which Will Be Taken To Avoid Further Deviations

For future license applications, TVA will maintain a file onsite to support all the information contained in the NRC Form 398. The training records supporting those applications already filed with NRC will be put together and maintained onsite.

Date Corrective Actions Will Be Completed

We will be in compliance by June 30, 1984.

DOCKET NO.

50-391

WATTS BAR

Facility Name

P. F. FREDERICKSON

Project Inspector

P's Initials

Date Acknowledged

ITEM NUMBER

84-09-01

TYPE

DEV

MODULE #

92706B

AREA

OPS

RESP.

PR

ACTION DUE DATE

- - - -

CLOSEOUT ACTION

- - - -

DESCRIPTIVE TITLE

SPO AND DO DOCUMENTATION OF INITIALS UNAVAILABLE CANCELLED L54K  
13-2-3-2

ITEM NUMBER

84-09-02

TYPE

IF1

MODULE #

92706B

AREA

OPS

RESP.

PR

ACTION DUE DATE

- - - -

CLOSEOUT ACTION

- - - -

DESCRIPTIVE TITLE

INCORPORATION OF MCD INTO INITIALS

ITEM NUMBER

84-09-03

TYPE

UR1

MODULE #

92706B

AREA

OPS

RESP.

PR

ACTION DUE DATE

- - - -

CLOSEOUT ACTION

- - - -

DESCRIPTIVE TITLE

INACCURACIES ON MCD FORM 398

ITEM NUMBER

84-09-04

TYPE

SL

MODULE #

92706B

AREA

OPS

RESP.

PR

ACTION DUE DATE

- - - -

CLOSEOUT ACTION

- - - -

DESCRIPTIVE TITLE

LOCALIZATION OF SYSTEM WALK-THROUGH NOT CONDUCTED IN PLANT  
INSTRUCTIONS

Information entered by MIS on

/

by

INITIALS

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

May 9, 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: MEETING SUMMARY - DOCKET NOS. 50-413 AND 50-414

This letter refers to the meeting conducted by mutual request in the NRC Region II Office on April 16, 1984. The purpose of the meeting was to discuss information developed by members of the Region II staff concerning the conduct of reactor operator and senior reactor operator training at your Catawba plant and to discuss the recent written license examination conducted at Catawba on March 20, 1984. A summary of this meeting is enclosed.

It is our opinion that this meeting served its intended function of providing us a better understanding of your training program and providing you an understanding of our concerns regarding the implementation of commitments that you have made to the NRC for the training of Catawba operators and senior operators.

During the meeting, you provided comments regarding the grading and content of written operator and senior operator examinations which were administered by the NRC on March 20, 1984. Copies of these graded examinations had been provided to you on April 9, 1984. Resolution of these comments will be documented in an examination report to be issued by Region II.

In accordance with Section 2.790 of NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in NRC's Public Document Room.

Should you have any questions concerning this matter, we will be pleased to discuss them.

Sincerely,

*James P. O'Reilly*  
James P. O'Reilly  
Regional Administrator

Enclosure: (See Page 2)

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~~8408300375~~

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May 9, 1984

Duke Power Company  
ATTN: Mr H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: MEETING SUMMARY - DOCKET NOS. 50-413 AND 50-414

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During the meeting, you provided comments regarding the grading and content of written operator and senior operator examinations which were administered by the NRC on March 20, 1984. Copies of these graded examinations had been provided to you on April 9, 1984. Resolution of these comments will be documented in an examination report to be issued by Region II.

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Should you have any questions concerning this matter, we will be pleased to discuss them.

Sincerely,

(original signed by JPO'Reilly)

James P. O'Reilly  
Regional Administrator

Enclosure: (See Page 2)

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May 9, 1984

Enclosure:  
Meeting Summary

cc w/encl:  
R. W. Bostian, Vice-President,  
Production Support  
J. W. Hampton, Catawba Station  
Manager

bcc w/encl:  
NRC Resident Inspector  
Document Control Desk  
State of South Carolina

RII

*for*  
BTDeBersa  
05/2/84

RII

JAOrshinski  
05/4/84

RII

*TR*  
TRogers  
05/2/84

RII

*Y*  
VLBrownlee  
05/8/84

RII

*HK*  
HKrug  
05/2/84

RII

*HC*  
HCDance  
05/8/84

RII

*Wilson*  
Wilson  
05/2/84

RII

*RC*  
RCLewis  
05/8/84

RII

*AG*  
AFGibson  
05/4/84

RII

*JMP*  
JMPuckett  
05/16/84

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ENCLOSURE

MEETING SUMMARY

LICENSEE: Duke Power Company  
FACILITY: Catawba  
DOCKET NOS.: 50-413 and 50-414  
LICENSE NOS.: CPPR-116 and CPPR-117  
SUBJECT: COLD LICENSE CERTIFICATION OBSERVATION TRAINING AND NRC  
EXAMINATIONS

A management meeting was held in the NRC Region II Office on April 16, 1984, to discuss with licensee representatives (herein after referred to as "licensee") information developed by members of the Region II staff concerning the conduct of reactor operator and senior reactor operator training, specifically the performance of the licensee's Cold License Certification Observation Task Lists, which was performed by Catawba operator candidates at the Oconee Nuclear Station. Also discussed were your comments regarding the grading and content of written operator and senior operator examinations which were administered by the NRC on March 20, 1984. Copies of these graded examinations had been provided to you on April 9, 1984. Resolution of these comments will be documented in an examination report to be issued by Region II.

Regarding the conduct of reactor operator and senior reactor operator training, the Region II staff voiced concerns that recent inspections performed by members of the Region's Operational Branch revealed questionable completions of the Cold License Certification Observation Task Lists. It was determined that during this phase of operator training, some candidates participated in plant operations at your Oconee Nuclear Station without direct supervision to ensure proper task completion. Your staff stated that observation training had been certified based upon procedure reviews, unsupervised and supervised walkthroughs, simulations, discussions or actual performances.

The NRC staff stated that this practice of conducting task training was inconsistent with previous commitments made to the NRC by Duke Power Company and advised that observation training should be directly supervised to ensure that training objectives are met. Additionally, NRC representatives expressed concern that your staff did not question the effectiveness of this training prior to submission of operator applications and the subsequent administration of NRC written examinations.

Duke Power representatives indicated that they believed that operator candidates had received sufficient training to meet the objectives of their approved training program. They further indicated that Duke had performed an in-depth audit of license applications which included the Cold License Certification Observations Task Lists. Their audit concluded that except for a few instances which were identified, all requisite tasks had been completed.

Enclosure

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NRC representatives stated that without direct supervision or supporting documentation, it is difficult to ascertain if the objectives of the Cold License Certification Observation training were met for the group of candidates in question.

Attachment:  
Attendance List

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ATTACHMENT

ATTENDANCE LIST

Attendance at the Duke - NRC meeting on April 16, 1984, at the NRC's Region II Office included:

Duke Power Company

H. B. Tucker, Vice President Nuclear Production  
R. W. Bostain, Vice President Production Support  
R. M. Koehler, Manager, Production Training Services  
S. Frye, Director of Operator Training  
C. W. Graves, Superintendent of Operations, Catawba  
W. H. Barron, Training Supervisor, Catawba

NRC - REGION II

J. P. O'Reilly, Regional Administrator  
R. C. Lewis, Director, Division of Project and Resident Programs  
A. F. Gibson, Chief, Operations Branch  
J. M. Puckett, Director, Enforcement (Acting)  
H. C. Dance, Chief, Project Branch 2  
V. L. Brownlee, Chief, Project Section 2A  
B. Wilson, Chief, Operator Licensing Section  
B. T. Debs, Reactor Inspector, Operational Programs Section  
T. Rogers, Reactor Operator Examiner, Operator Licensing Section  
T. Norris, Reactor Operator Examiner, Operator Licensing Section

Laurie  
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INSPECTION/INVESTIGATION REPORT ONLY

DISTRIBUTION CODE \_\_\_\_\_

Suspense Date: 6-29-84

Report sent to Licensee & HQs & hold copies reproduced

ADDITIONAL COPIES TO: \_\_\_\_\_

Date: 5-29-84

Initials: MM

INCOMING LICENSEE CORRESPONDENCE

① Licensee Response to Enforcement Report (Acknowledgement Letter Required Yes)

a. Licensee/Facility Duke Power Co./Catawba

b. Report Number 50-413/84-45 c. Document Date 6-29-84

d. Date Received 7-2-84

e. Inspector Debs

f. Section Chief \_\_\_\_\_

g. Document transferred to \_\_\_\_\_ Branch/Date \_\_\_\_\_

Initials \_\_\_\_\_

② Licensee Response to Enforcement Report

Acceptable \_\_\_\_\_ Non-Acceptable \_\_\_\_\_ Initials \_\_\_\_\_

③ 2.790 Information YES \_\_\_\_\_ NO \_\_\_\_\_ Initials \_\_\_\_\_

NOTE: If Yes, Please inform PDR Coordinator of the information that is 2.790

④ Should the attached and related correspondence be placed in the PDR?

YES \_\_\_\_\_ NO \_\_\_\_\_ Initials \_\_\_\_\_

PDR COORDINATOR ONLY

Incoming Licensee Correspondence and related documents placed into the PDR.

Date \_\_\_\_\_ Initials \_\_\_\_\_

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

May 29, 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NO. 50-413/84-45

On April 10 - 12, 1984, NRC inspected activities authorized by NRC Construction Permit No. CPPR-116 for your Catawba facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

The NRC's concerns relative to the inspection findings were discussed by Mr. James P. O'Reilly, Regional Administrator, of this office, and Mr. H. B. Tucker, Vice President Nuclear Production, of your office, in a management meeting held at NRC Region II Office, Atlanta, Georgia, on April 16, 1984.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements and other activities appeared to deviate from a commitment to NRC. The violation and deviation, with pertinent references and elements to be included in your response, are presented in the enclosed Notices.

Inaccurate information submitted by Duke Power Company as part of applications for Catawba operator and senior operator examinations was cited as a violation of NRC regulations by our letter to you dated April 18, 1984. Additional examples of this violation were found during our inspection of April 10-12. These examples are described in the enclosed inspection report.

In addition to the need for corrective action regarding these specific violations, we are concerned, as we stated during the management meeting, about the implementation of your management control systems that permitted their occurrence. Consequently, in your reply you should describe in particular those actions taken or planned to improve the effectiveness of your management control system.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained therein, please notify this office by telephone and include a written application to withhold information in your response. Such application must be consistent with the requirements of 2.790(b)(1).

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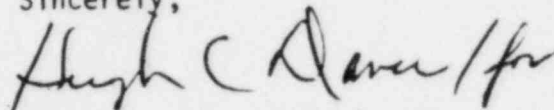


May 29, 1984

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard C. Lewis / for". The signature is fluid and cursive, with a large initial "R" and "L".

Richard C. Lewis, Director  
Division of Reactor Projects

Enclosures:

1. Notice of Violation
2. Notice of Deviation
3. Inspection Report No. 50-413/84-45

cc w/encls:

R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

May 29, 1984

Report No.: 50-413/84-45

Licensee: Duke Power Company  
422 South Church Street  
Charlotte, NC 28242

Docket No.: 50-413

License No.: CPPR-116

Facility Name: Catawba 1

Inspection at Catawba site near Rock Hill, South Carolina

Inspector:

B. T. Debs

5/11/84  
Date Signed

Approved by:

H. Krug, (Acting) Section Chief  
Operations Program Branch  
Division of Reactor Safety

5/16/84  
Date Signed

#### SUMMARY

Inspection on April 10-12, 1984

#### Areas Inspected

This routine, unannounced inspection involved 20 inspector-hours on site in the areas of licensee submitted NRC Form-398(s).

#### Results

Of the area inspected, one violation and one deviation was identified.

~~8409240157~~

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ENCLOSURE 1

NOTICE OF VIOLATION

Duke Power Company  
Catawba

Docket No. 50-413  
License No. CPPR-116

The following violation was identified during an inspection conducted on April 10 - 12, 1984. The Severity Levels were assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

10 CFR 50 Appendix B, Criterion V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances, and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, the licensee did not establish specific plant procedures or instructions governing their Cold License Certification Observation training.

This is a Severity Level IV violation (Supplement II).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: May 29, 1984

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ENCLOSURE 2

NOTICE OF DEVIATION

Duke Power Company  
Catawba 1

Docket No. 50-413.  
License No. CPPR-116

The following deviation was identified during an inspection conducted on April 10 - 12, 1984.

Catawba Nuclear Station Final Safety Analysis Report Section 13.2.2.2.2(k) states, in part, that the Cold Certification Observation Check List provides structured guidance for required observation tasks.

Cold License Certification Program description, Duke Power File No. GS-943/OPS-NRC, presented to and accepted by the NRC in October 1977, states, in part, that the Cold Certification Observation task date shall be the date the task is signed off as being observed.

Contrary to the above, in two instances, the Cold Certification Observation Check Lists were incorrectly documented as completed.

Please provide, in writing within 30 days of the date of this Notice, a description of corrective actions regarding this deviation, actions taken to avoid further deviations, and the dates when these actions were or will be completed.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: May 29, 1984

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*J. Hampton, Plant Manager
- \*S. Frye, Director of Operator Training
- \*C. W. Graves, Superintendent of Operations
- \*G. Barrett, Training Supervisor
- L. E. Schmid, Systems Production Engineer

Other licensee employees contacted included six operator candidates, and three office personnel.

#### Other Organization

Oconee Nuclear Station Training Center

#### NRC Resident Inspectors

- \*P. A. Skinner, Senior Resident Inspector (Operations)
- P. K. VanDoorn, Senior Resident Inspector (Construction)

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on April 12, 1984, with those persons indicated in paragraph 1 above. Additionally, licensee management was informed that the inspection findings would probably be discussed at a Duke-NRC management meeting scheduled for April 16, 1984, at the NRC Region II Office in Atlanta, Georgia.

### 3. Licensee Action on Previous Enforcement Matters

(URI 50-413/84-39-01) Apparent inaccuracies on NRC Form 398(s). As a follow up to this item, the inspector reviewed additional training records for candidates who were certified by the licensee as cold license eligible. The inspector observed that the plant and control room sections of the Cold License Certification Observation Task List for docket numbers 20280 and 20256, had been signed by a single individual and dated as being performed in a single day.

As a result of interviews with licensee management, operator candidates, and training personnel; it was concluded that these two task lists had been completed at Duke's Oconee Nuclear Station in March 1980. The two trainees in question represented individuals from an original training group of six.

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The trainees had been assigned to a member of the Oconee training staff. This individual provided the trainees with a plant and program orientation during their first day on site. The trainer then assigned the trainees to a shift. During their tour on shift, the trainees were to complete their task lists. The trainees indicated to the inspector that they had performed some action on each line item on the list. These actions consisted of either a procedure review, simulation, discussion, actual observation or performance, or a combination of these actions. One trainee specifically recalls not having observed certain control room operations as indicated on the task list, however, he did remember performing either a procedure review and/or simulation. Furthermore, the trainees indicated that the performance of these observation task lists during March 1980 were unsupervised. At the end of this observation period, the trainees discussed the items of the task list with the Oconee training representative who then signed and dated the task lists. Licensee management stated that the aforementioned method of completing this phase of training was acceptable and the convention at that time although no established plant procedure specifically allowed alternate methods of task completion.

The inspector expressed concern that apparently not all of the task list items were completed on the date indicated or in the manner indicated on the lists and that the performance of the task list items were unsupervised.

The licensee was unable to produce established plant procedures governing the licensee's Cold Licensee Certification Observation training, however, a broad program description does exist in the Duke Power Corporate Training Manual.

Section 13.2.2.2.2(K) of the Catawba Nuclear Station Final Safety Analysis Report states, in part, that the Cold Certification Observation Check List provides structured guidance for required observation tasks. The Cold Licensee Certification Program, File No. GS-943/OPS-NRC, which was presented to the NRC Operator Licensing Branch in October 1977, and accepted by a letter from Mr. Paul F. Collins, Chief, Operator Licensing Branch to Mr. William O. Parker, Duke Power Company Vice President of Steam Production states, in part, that Cold Licensee Certification Observation Task date should be the date the task is signed off as being observed. The licensee was telephonically informed that for docket numbers 20280 and 20256 the Cold Licensee Certification Observation Task lists were incorrectly documented as complete, and; therefore, represents a deviation from commitments to the NRC (Deviation 50-413/84-45-01).

10 CFR 50, Appendix B, Criterion V states, in part, that activities affecting quality shall be prescribed by documented instructions or procedures of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions or procedures.



The licensee's lack of an approved on-site instruction or procedure governing the Cold Licensee Certification Observation Training represents a violation of the aforementioned Federal Regulation (VIO 50-413/84-45-02).

Regarding the two clerical errors which were identified on the NRC Form 398(s) for Docket Numbers 20270 and 20256 and identified as part of the aforementioned unresolved item, evaluation of the correct information by the NRC determined that had the NRC known the correct information at the time of the submittals, the license eligibility of the individual applicants would not have been affected. The inspector, however, expressed concern that although the licensee had performed a detailed audit of submitted NRC Form 398(s), some errors remain. The inspector informed licensee management that these clerical errors are considered two additional examples of the violation of 10CFR55.10(a)(6) and (d) as cited in NRC Inspection Report Nos. 50-413/84-25 and 50-414/84-10 dated April 18, 1984.

#### 4. Management Meeting

A meeting was held at the mutual request of the licensee and the NRC, on April 16, 1984, in the NRC Region II Office in Atlanta, GA, to discuss, in part, NRC concerns regarding the finding of this inspection.

Meeting attendance was as follows:

- H. B. Tucker, Vice President, Nuclear Production
- R. W. Bostain, Vice President, Production Support
- R. M. Kohler, Manager, Production Training Services
- S. Frye, Director of Operator Training
- C. W. Graves, Superintendent of Operations, Catawba
- W. H. Barron, Training Supervisor, Catawba

#### U. S. Nuclear Regulatory Commission, Region II

- James P. O'Reilly, Regional Administrator
- R. C. Lewis, Director, Division of Reactor Projects
- A. F. Gibson, Chief, Operations Branch
- J. M. Puckett, Director, Enforcement (Acting)
- H. C. Dance, Chief, Project Branch 2
- V. L. Brownlee, Chief, Project Section 2A
- B. Wilson, Chief, Operator Licensing Section
- B. T. Debs, Reactor Inspector, Operational Programs Section
- T. Rogers, Reactor Operator Examiner, Operator Licensing Section
- T. Norris, Reactor Operator Examiner, Operator Licensing Section

Region II NRC representatives discussed the conduct of reactor operator and senior reactor operator candidate training, specifically Cold Licensee Certification Observation training, and the accuracy of information which has been provided on NRC Form 398(s) with licensee representatives. The details of this meeting are contained in a letter from Mr. James P. O'Reilly to Mr. H. B. Tucker dated May 9, 1984.

INSPECTOR

ISIV. DEBS

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LICENSEE/VENDOR		TRANSACTION TYPE		DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		NEXT INSPEC. DATE	
CATANBA / DUKA		<input checked="" type="checkbox"/> I - INSERT <input type="checkbox"/> M - MODIFY <input type="checkbox"/> D - DELETE <input type="checkbox"/> R - REPLACE		5000004138445		NO SEQ MO YR		NO SEQ MO YR	

PERIOD OF INVESTIGATION/INSPECTION			INSPECTION PERFORMED BY			ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 Manpower Reporting - Weekly Manpower Reporting for code)		
FROM TO MO DAY YR MO DAY YR 04 10 84 04 12 84			<input checked="" type="checkbox"/> 1 - REGIONAL OFFICE STAFF <input type="checkbox"/> 2 - RESIDENT INSPECTOR <input type="checkbox"/> 3 - PERFORMANCE APPRAISAL TEAM			OTHER REGION DIVISION BRANCH 2 C B		

REGIONAL ACTION (Check one box only)		TYPE OF ACTIVITY CONDUCTED (Check one box only)			
<input checked="" type="checkbox"/> 1 - NRC FORM 501 <input type="checkbox"/> 2 - REGIONAL OFFICE LETTER		<input type="checkbox"/> 02 - SAFETY <input type="checkbox"/> 03 - INCIDENT <input type="checkbox"/> 04 - ENFORCEMENT <input type="checkbox"/> 05 - MGMT. AUDIT <input checked="" type="checkbox"/> 06 - MGMT. VISIT <input type="checkbox"/> 07 - SPECIAL <input type="checkbox"/> 08 - VENDOR <input type="checkbox"/> 09 - MAT. ACCT. <input type="checkbox"/> 10 - PLANT SEC. <input type="checkbox"/> 11 - INVENT. VER. <input type="checkbox"/> 12 - SHIPMENT/EXPORT <input type="checkbox"/> 13 - IMPORT <input type="checkbox"/> 14 - INQUIRY <input type="checkbox"/> 15 - INVESTIGATION			

INSPECTION INVESTIGATION FINDINGS (Check one box only)				TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS				ENFORCEMENT CONFERENCE HELD				REPORT CONTAIN 2790 INFORMATION				LETTER OR REPORT TRANSMITTAL DATE			
<input checked="" type="checkbox"/> 1 - CLEAR <input type="checkbox"/> 2 - VIOLATION <input type="checkbox"/> 3 - DEVIATION <input type="checkbox"/> 4 - VIOLATION & DEVIATION				A B C D 2				A B C D 1 - YES				A B C D 1 - YES				NRC FORM 501 OR REG LETTER ISSUED MO DAY YR 05 29 84			

MODULE INFORMATION														MODULE INFORMATION																						
MODULE NUMBER INSP										MODULE REQ. FOLLOWUP				MODULE NUMBER INSP										MODULE REQ. FOLLOWUP												
TYPE	NUMBER	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL	SEQ	PRIORITY	DIRECT INSPEC. FROM EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL	TYPE	NUMBER	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER	LEVEL	SEQ	PRIORITY	DIRECT INSPEC. FROM EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	PHASE	MANUAL	CHAPTER	PROCEDURE	NUMBER
B	3	9	2	7	0	4	B			0.19	100%	A								B																

\* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION

A53

**INSPECTOR'S REPORT**  
**(Continuation)**  
**Office of Inspection and Enforcement**

DOCKET NO. (8 digits) OR LICENSE  
 NO. (BY PRODUCT) (13 digits)

REPORT

MODULE NUMBER

NO

SEQ.

A

B

C

D

VIOLATION SEVERITY OR DEVIATION

SITE

RELATED

A C

B D

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 60 characters each.)

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APR 23 1984

ENCLOSURE

SALP EVALUATION

Instructions:

- (1) Complete one evaluation for each area inspected.
- (2) Complete the evaluations on site.
- (3) Include one copy of evaluations with inspection report draft.
- (4) 0-not inspected; 1-above average; 2-average; 3-below average

LICENSEE DUKE PWR FACILITY CATAWBA UNIT 1

INSPECTOR B.T. DEBS INSPECTOR HOURS 20 RPT NO/DATE 50-413/84-45

AREAS INSPECTED OPERATOR TRAINING

ENFORCEMENT 1 VIO - SL4

1 DEV

Evaluation Criteria

Assessment

- |  |                |
|--|----------------|
| 1. Management involvement in assuring quality              | 0 1 2 <u>3</u> |
| 2. Resolution of technical issues from a safety standpoint | <u>0</u> 1 2 3 |
| 3. Responsiveness to NRC initiatives                       | 0 1 <u>2</u> 3 |
| 4. Enforcement history                                     | <u>0</u> 1 2 3 |
| 5. Reporting and analysis of reportable events.            | <u>0</u> 1 2 3 |
| 6. Staffing (including management)                         | <u>0</u> 1 2 3 |
| 7. Training and qualification effectiveness                | <u>0</u> 1 2 3 |

COMMENTS: \_\_\_\_\_

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ASSESSMENT OF AREA INSPECTED

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\*NOTE: Please attach additional sheet if needed for comments.

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

JUN 25 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-413/84-25 AND 50-414/84-10

Thank you for your response of May 21, 1984, to our Notice of Violation issued on April 18, 1984, concerning activities conducted at your Catawba facility. We have evaluated your response and found that it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

We appreciate your cooperation in this matter.

Sincerely,

*R.C. Lewis*  
Richard C. Lewis, Director  
Division of Reactor Projects

cc: R. L. Dick, Vice President  
- Construction  
J. W. Hampton, Station Manager

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**DUKE POWER COMPANY**

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

May 21, 1984 34 MAY 23 P 1:01

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: RII:BTD  
50-413/84-25  
50-414/84-10

Dear Mr. O'Reilly:

Please find attached responses to Violation No. 413/84-25-01, 414/84-10-01 and Deviation No. 413/84-25-02, 414/84-10-02, as identified in the above referenced inspection report. Duke Power Company does not consider any information contained in this inspection report to be proprietary.

Very truly yours,

*H.B. Tucker*

Hal B. Tucker

LTP/php

Attachment

cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

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ASZ

Duke Power Company  
Catawba Nuclear Station

Violation:

10 CFR 55.10(d) requires that each application and statement shall contain complete and accurate disclosure as to all matters and things required to be disclosed.

10 CFR 55.10(a)(6) requires certification that the applicant has learned to operate the controls in a competent and safe manner and has need for an operator or senior operator license. This certification may be provided by an authorized representative of the facility licensee where the applicant's services will be utilized. The certification must include details on courses of instruction administered by the facility licensee, number of course hours, and the number of hours of training received at the facility.

Contrary to the above, in eleven instances inaccurate information was submitted by Duke Power Company as part of the required certification in February 1984 on applications for operator and senior operator licenses at the Catawba facility. However, if the correct information had been known at the time of the submittal, the license eligibility of the individual applicants would not have been affected.

Response:

- (1) Duke admits the violation as stated.
- (2) The reason the violation occurred was a failure to adequately audit the applications and eliminate misleading information. An inadequate understanding of the components of NRC Form 398 contributed to the problem.
- (3) Corrective steps which have been taken include:
  - (a) A complete audit of operator training records has been accomplished.
  - (b) Corrections were made to all records to accurately reflect training received and to remove redundant information.
  - (c) An attachment to NRC Form 398 was created to further explain information provided.
  - (d) Applications have been resubmitted.
- (4) The corrective actions listed in (3) should be sufficient to prevent further violations. In the future, all initial submittals of Form 398 will have the above mentioned attachment.
- (5) All further submittals of applications for operator and senior operator licenses will be in compliance with this response.

ASZ

Duke Power Company  
Catawba Nuclear Station

Deviation:

Catawba Nuclear Station Final Safety Analysis Report Section 13.2.2.2.2(k) states, in part, that the cold certification observation check list provides structured guidance for required observation tasks.

Contrary to the above, in 13 instances, cold certification observation check lists were not documented as completed for operator license candidates.

Corrective Action Taken:

All Cold Certification task lists were audited and the task lists were discussed with each individual in Cold License Group 1. The required tasks that were identified as not being completed were completed by May 7, 1984 prior to the oral examination. In addition an independent audit is being performed by Duke's Operations General Office staff. This audit will be completed by June 1, 1984. An audit will be performed on Cold License Group 2 and discrepancies resolved by July 5, 1984.

Actions Taken to Avoid Further Deviations:

Individuals involved have been instructed on the importance of proper documentation and performance of tasks.

Dates When Actions Will Be Completed:

Formal guidance is presently in place for present task lists and formal procedures will be developed and in place prior to beginning hot license training.

DUKE POWER COMPANY

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

June 29, 1984

TELEPHONE  
(704) 373-4531

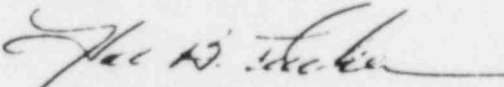
Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: RII:BTD  
50-413/84-45

Dear Mr. O'Reilly:

Please find attached responses to Deviation No. 413/84-45-01 and Violation No. 413/84-45-02 as identified in the above referenced inspection report. Duke Power Company does not consider any information contained in this inspection report to be proprietary.

Very truly yours,

  
Hal. B. Tucker

LTP/rhs

Attachment

cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

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DUKE POWER COMPANY  
CATAWBA NUCLEAR STATION

VIOLATION: No. 413/84-45-02

10 CFR 50 Appendix B, Criterion V states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances, and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, the licensee did not establish specific plant procedures or instructions governing their Cold License Certification Observation training.

Response:

1. Duke admits the violation as stated.
2. The reason the violation occurred was failure to translate the broad program requirements into sufficient detail instruction, to assure training was consistent and properly documented.
3. Corrective steps which have been taken include:
  - (a) An independent audit was performed on Cold License Group 1 by Duke's Operations General Office staff. This audit was completed on June 1, 1984. An audit is presently being performed on Cold License Group 2 and will be completed by July 5, 1984
  - (b) All discrepancies as a result of the audits will be resolved by July 5, 1984.
  - (c) "Task Training Cold License Preparation" documents formal guidance for present task lists.
  - (d) Individuals involved have been instructed on the importance of proper documentation and performance of tasks.
4. Formal procedures are being developed and will be in place prior to beginning Hot License training. These procedures should prevent recurrence.
5. Full compliance will be achieved prior to beginning Hot License training.

DUKE POWER COMPANY  
CATAWBA NUCLEAR STATION

DEVIATION: No. 413/84-45-01

Catawba Nuclear Station Final Safety Analysis Report Section 13.2.2.2.2(k) states, in part, that the Cold Certification Observation Check List provides structured guidance for required observation tasks.

Cold License Certification Program description, Duke Power File No. OS-943/OPS-NRC, presented to and accepted by the NRC in October 1977, states, in part, that the Cold Certification Observation task date shall be the date the task is signed off as being observed.

Contrary to the above, in two instances, the Cold Certification Observation Check Lists were incorrectly documented as completed.

Response:

1. Duke admits the deviation as stated.
2. The reason for the deviation was a failure to establish and implement a formal procedure governing the conduct of Cold License Certification Observation training.
3. Corrective steps which have been taken include:
  - (a) An independent audit was performed on Cold License Group 1 by Duke's Operations General Office staff. This audit was completed on June 1, 1984. The results of this independent audit indicated that the two individuals in question had completed the task list, however, they were incorrectly documented as the above deviation states. An audit is presently being performed on Cold License Group 2 and will be completed by July 5, 1984.
  - (b) All discrepancies identified as a result of the audits will be resolved by July 5, 1984.
  - (c) Individuals involved have been instructed on the importance of proper documentation and performance of tasks.
  - (d) "Task Training Cold License Preparation" documents formal guidance for present task lists.
4. Formal procedures are being developed and will be in place prior to beginning Hot License training. These procedures should prevent recurrence.
5. Full compliance will be achieved prior to beginning Hot License training.



Debs



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

JUL 06 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NO. 50-413/84-70

On June 12 - 15, 1984, NRC inspected activities authorized by NRC Construction Permit No. CPPR-116 for your Catawba facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Within the scope of the inspection, no violations or deviations were identified.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in NRC's Public Document Room unless you notify this office by telephone within 10 days of the date of this letter and submit written application to withhold information contained therein within 30 days of the date of the letter. Such application must be consistent with the requirements of 2.790(b)(1).

Should you have any questions concerning this letter, please contact us.

Sincerely,

Hugh O. Dance, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

Enclosure:  
Inspection Report No. 50-413/84-70

cc w/encl:  
R. L. Dick, Vice President - Construction  
J. W. Hampton, Station Manager

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARNETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

JUL 06 1984

Report No.: 50-413/84-70

Licensee: Duke Power Company  
422 South Church Street  
Charlotte, NC 28242

Docket No.: 50-413

License No.: CPPR-116

Facility Name: Catawba

Inspection Date: June 12-15, 1984

Inspection at Catawba site near Rock Hill, South Carolina

Inspectors: The Inspection Team consisted of B. T. Debs and D. F. Falconer.  
Assistance was provided by F. R. McCoy.

Team Leader:

B. T. Debs  
B. T. Debs, Reactor Inspector  
Operational Programs Section

3 JUL 1984  
Date Signed

Accompanying Personnel: F. R. McCoy

Approved by:

H. E. P. Krug  
H. E. P. Krug, Section Chief (Acting)  
Operational Programs Section  
Division of Reactor Safety

3 JUL 84  
Date Signed

SUMMARY

Scope: This special, announced inspection involved 60 inspector-hours on site in the areas of Operator Shift Experience and Manning and the Shift Advisor Program.

Results: The Catawba Unit 1 Operator Shift manning and experience and the Shift Advisor Program were inspected. The team concluded that the proposed shift manning would result in effective staffing of the operating shifts at Catawba.

With the implementation of three recommendations that the licensee agreed to adopt, the team concluded that the Shift Advisors are properly trained and qualified to perform their assigned duties at Catawba.

Of the two areas inspected, no violations or deviations were identified.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

H. B. Tucker, Vice President - Nuclear Production, Duke Power Co.  
\*J. W. Hampton, Plant Manager, CNS  
\*C. W. Graves, Operations Superintendent, CNS  
\*L. E. Schmid, Systems Production Engineer, CNS  
\*W. Barron, Senior Instructor, CNS  
G. L. Mitchell, Assistant Operating Engineer, CNS  
R. Kimray, Associate Instructor, CNS  
C. Spurlin, Associate Instructor, CNS  
\*L. W. H. Bradley, QA Surveillance, CNS  
\*C. L. Hartzell, Licensing Engineer, CNS  
\*P. G. Leroy, Licensing Engineer, CNS  
#D. J. Rains, Superintendent of Maintenance, MNS  
#B. Travis, Operating Engineer, MNS  
#D. Mendezoff, License Engineer, MNS  
R. A. Lindsey, Assistant Shift Supervisor, MNS  
R. W. Mayes, Assistant Shift Supervisor, MNS  
C. B. Craig, Assistant Shift Supervisor, MNS

#### Other Organizations

K. Jabbour, NRC/DL  
L. Crocker, NRC/DHFS/LQB  
H. Thompson, NRC/NRR/DHFS  
T. Novak, NRC/DL  
A. Gibson, NRC/RII  
V. Brownlee, NRC/RII  
P. Taylor, NRC/RII

#### NRC Resident Inspectors

\*P. Skinner, SRI, CNS  
#W. Orders, SRI, MNS  
#R. Pierson, RI, MNS

\*Attended exit interview, CNS, June 15, 1984  
#Attended exit interview, MNS, June 13, 1984

### 2. Exit Interview

The inspection scope and findings were summarized on June 13 and June 15, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Operator Shift Experience and Manning

An inspector discussed and reviewed Duke Power's proposal to initially man four shifts of twelve hour rotation. Also discussed were future plans for five shifts of eight hour rotation. The aforementioned review included discussion of operator requalification training during four shift rotation, Duke Power's experience associated with twelve hour shift rotations, staffing requirements for four and five shift rotation, and the hot participation experience of designated operating shift personnel. In addition, a shift manning document was provided to and discussed with the inspector. This document contained the proposed operator shift assignments, and the hot operating experience of each Reactor and Senior Reactor operator. It was noted that the initial four shifts vice five shift proposal provided a greater experience density per shift.

The inspection team reviewed the crew experience against the criteria contained in the proposal by the Industry Working Group, presented to the Commissioners on February 24, 1984, by Mr. J. H. Miller of Georgia Power Company and Mr. D. F. Schnell of Union Electric Company; as clarified by a letter from Chairman N. J. Palladino to Mr. J. H. Miller dated June 14, 1984. The inspection team concluded that the licensee meets or exceeds these criteria. The letter of June 14, 1984, requests that the NRC staff be notified one month prior to the release of Shift Advisors from the plant to which they are assigned. This notification provision is being carried as Inspector Followup Item 413/84-70-01, "Notification of SA Discontinuation."

Within the areas inspected, no violations or deviations were identified.

6. Shift Advisor Program

a. Introduction

On June 12-15, 1984, an inspection team composed of three individuals from the Operations Branch, Division of Reactor Safety, Region II, visited the Catawba Nuclear Station in order to evaluate the Catawba Unit 1 Shift Advisor Program and the capabilities of the Catawba Shift Advisors to provide adequate advice to the operating shifts. The team members reviewed the procedure developed by the licensee which describes the duties and responsibilities of the Shift Advisors, reviewed the resumes of the Shift Advisors to determine whether they meet the industry criteria for Shift Advisors, reviewed the results of a six member Utility Advisor Evaluation Team evaluation of the Catawba Shift Advisor Program, reviewed the Training Program provided to the Shift

Advisors, reviewed Training records for the Shift Advisors, reviewed Shift Advisor Written and Oral Examinations and Examination Results, interviewed Licensee Management in order to discuss previous performance ratings of the shift advisors and their involvement in reactor plant events during the rating period, interviewed four of the eight Shift Advisors, interviewed two of the training instructors who administered the Shift Advisor Training Program, and interviewed one member of station staff who had administered portions of the oral examinations.

b. Program Status

At the time of the visit, each shift advisor had completed his designated training program for Shift Advisor; two were continuing in the Catawba Nuclear Station Cold License Certification Program and five were working with McGuire Nuclear Station plant operating shifts while one was working with McGuire Nuclear Station. The six McGuire based advisors were currently licensed as Senior Reactor Operators at McGuire. Also at the time of this visit, a six member Utility Advisor Evaluation Team had completed an industry review of the Catawba Shift Advisor Program and had published the results of this review in a letter to the licensee dated June 8, 1984. The stated intent of the licensee is to assign an advisor to each operating shift prior to Catawba Unit 1 Fuel Loading. Each advisor will rotate as a shift member and will participate in periodic requalification training at his home based unit. The team endorses these licensee intentions.

c. Shift Advisor Procedure

The procedure governing the duties and responsibilities of the Shift Advisor Program is a report approved by G. Vaughn on May 4, 1984, entitled "The Catawba Nuclear Station Shift Advisor Program." While on shift duty, the Shift Advisor advises the Shift Supervisor and reports to the Shift Operating Engineer, who also directs the activities of the Shift Supervisor. The evaluation team considers these reporting arrangements to be acceptable.

Review of the report delineating the Shift Advisor program found that the report properly described the duties and responsibilities of the Shift Advisor subject to incorporation of the Utility Advisor Evaluation Team review recommendations.

d. Utility Advisor Evaluation Team Industry Review of the Shift Advisor Program

A six member Utility Advisor Evaluation Team (UAET) consisting of representatives from six major nuclear utilities, conducted a comprehensive evaluation of the Catawba Shift Advisor Program on June 6, 7, and 8, 1984. The UAET evaluated all aspects of the program including advisor training, qualifications, responsibilities, interfaces between the shift crews and the advisor, procedures and examinations. The



evaluation included documentation reviews, interviews with Duke Power Company (DPC) shift advisors, management and operations staff, direct observation of shift operations, and a simulator visit.

The UAET concluded that DPC had defined an effective Shift Advisor program, had selected qualified individuals, and had provided training appropriate for the shift advisors.

The UAET also concluded that the advisors can rapidly and effectively communicate their experience to the Catawba shift crews. It was the UAET's unanimous opinion that DPC's Shift Advisor program provided sufficient additional assurance that the Catawba Nuclear Station can be started up and operated safely in accordance with NRC regulatory requirements.

The UAET members recommended the following improvements which will further strengthen the program:

- (1) Revise "The Catawba Nuclear Station Shift Advisor Program" approved by G. Vaughn on May 4, 1984, by modifying the Duties and Responsibilities section as follows:
  - (a) Change the wording of Step B.1 so that it clearly indicates that the Shift Advisor is to participate in the entire Shift Supervisor turnover process as described in the Operations Management Procedure on shift turnovers.
  - (b) Delete from Step B.4, the words "at the SS's request" so as to clearly indicate that the Shift Advisor is encouraged to provide advice whenever appropriate.
  - (c) Add to the procedure, a copy of an organization chart of the Catawba Operations section that will promote a better understanding of the reporting relationships between the Shift Advisor and the rest of the shift organization.
- (2) Incorporate the revised Catawba Nuclear Station Shift Advisor Program into a station procedure and review this revised procedure with all shift advisors and appropriate shift operating personnel.
- (3) Establish a structured Shift Advisor Update program to assure that shift advisors assigned to McGuire Nuclear Station remain aware of significant operating events at Catawba Nuclear Station.
- (4) Assure that all shift advisors are cognizant of significant differences between NRC approved Catawba Technical Specifications and the Technical Specifications used in the training of each group of shift advisors.
- (5) Consider assignment of the shift advisors on shift prior to RCS fill and vent so that the benefit of their experience during this and subsequent evolutions may be more fully utilized. (The licensee indicated to the team that the shift advisors will be on shift prior to fuel load).



- (6) Assure that each McGuire based shift advisor has reviewed the course final exam prior to assuming shift advisor duties.
- (7) Assure that each Catawba based shift advisor reviews the Operations Management Procedures prior to assuming shift advisor duties.
- (8) Provide oral examinations to the Catawba based shift advisors on the responsibilities of the Shift Advisor.

The stated intent of the licensee is to incorporate the UAET recommendations into the Shift Advisor program. The team endorses these plans. This is Inspector Followup Item 413/84-70-02, "UAET recommendations."

e. Shift Advisor Qualifications

The licensee's stated qualification requirements for Shift Advisors as delineated in a licensee letter to the Office of Nuclear Reactor Regulation dated March 14, 1984 and as supplemented by the "Catawba Nuclear Station Shift Advisor Program" approved by G. Vaughn on May 1984, are as follows:

- (1) The Shift Advisor will have four years power plant experience.
- (2) The Shift Advisor will have at least two years on-shift experience as a licensed operator (preferably one year of this as a Senior Reactor Operator) at a similar type plant.
- (3) The Shift Advisor will have at least one year on shift as a NRC licensed operator at a hot nuclear plant of the same type.

A review of resumes of all Shift Advisors and interviews with seven of the eight Shift Advisors reflected that all Shift Advisors exceeded the licensee stated qualification requirements.

During the course of the review of Shift Advisor qualifications, it was noted that the two Catawba based Shift Advisors had allowed their NRC licensing medical examinations to lapse. The evaluation team believes that the advisors should meet the same medical criteria as licensed operators. This matter was discussed with the licensee and it was agreed that Duke Power Company would arrange for medical examinations to be satisfactorily completed for these two individuals prior to Catawba Unit 1 fuel loading. The team informed the licensee that the aforementioned item will be carried as Inspector Followup Item 413/84-70-03, "Shift Advisor Medicals."

f. Shift Advisor Performance Evaluation

A review of the performance of the six McGuire based Shift Advisors was conducted for the current rating period (August 1983 to date). An interview with supervision for these advisors reflected that all

McGuire based advisors were rated satisfactory for the rating period and considered by their supervisor to be in the upper half of their peer group. During the course of this interview, information was provided relative to involvement in technical specification violations and reportable and nonreportable events occurring during the current rating period. In summary, two of the six McGuire shift advisors were involved in no technical specification violations or events, one was involved in a single reportable event concerning improper independent verification of restoration of a charging pump breaker, and one was involved in a single technical specification violation concerning a late Reactor Coolant System Leakage calculation. One was involved in a single event concerning inadequate technical specification logbook review during turnover, and one was involved in a single nonreportable event concerning an out of commission centrifugal charging pump.

The inspectors considered these to be isolated events and not indicative of an unacceptable performance trend. The past performance of the McGuire based individuals was judged satisfactory for fulfilling their role as Shift Advisors based upon the performance review conducted.

g. Shift Advisor Training Program, Training Records, and Training Instructor Interviews

The Shift Advisor training program for Catawba based Shift Advisors and McGuire based Shift Advisors were tailored to the specific needs of each group based on the specific group experiences and consequently, were different.

The requirements for Catawba based Shift Advisors as delineated in the "Catawba Nuclear Station Shift Advisor Program" approved by G. Vaughn on May 4, 1984, were programmed by the licensee to enable experienced individuals who had held an SRO license on the Oconee Nuclear Station and who were participating in the Catawba Nuclear Station Cold License Preparatory Training to properly function as Shift Advisors.

The requirements for this Catawba based Shift Advisor training program are:

- (1) Training on the duties and responsibilities of a Shift Advisor
- (2) Completion of the Systems, Theory, Simulator, and Procedures Segments of the Catawba Cold License Preparatory Training
- (3) Satisfactorily passing written examinations on the four Cold License Preparatory Training segments with an overall average grade of  $\geq 80\%$ .

Both Catawba based Shift Advisors had satisfactorily fulfilled these program requirements based on review of training records. As previously stated, the UAET review recommended and the licensee agreed to

provide oral examinations to the Catawba based Shift Advisors on the responsibilities of the Shift Advisor.

Our evaluation team noted that both of the Catawba based Shift Advisors were currently in procedure walkthroughs scheduled to be completed on July 9, 1984, (after scheduled fuel load and shift assignments) and considered it necessary that walkthroughs on the new Symptom Oriented Emergency Procedures be completed prior to these advisors standing shift. This matter was discussed with the licensee and the licensee stated that both of these Shift Advisors would complete Emergency Procedure System Walkthroughs prior to assignment to a shift. The inspectors informed the licensee that the aforementioned item will be carried as Inspector Followup Item 413/84-70-04, "EP Walkthroughs."

The requirements for McGuire based Shift Advisors as delineated in the "Catawba Nuclear Station Shift Advisor Program" approved by G. Vaughn on May 4, 1984, were programmed by the licensee to enable experienced individuals currently holding an SRO license on the McGuire Nuclear Station to adequately function as Shift Advisors at Catawba Nuclear Station. The requirements for this McGuire based Shift Advisor training program are:

- (1) Training on the duties and responsibilities of the Shift Advisor
- (2) Training on significant system differences between Catawba and McGuire Nuclear Stations
- (3) Training on Operating Procedures, Abnormal Procedures, Emergency Procedures, Station Emergency Plan, and Operations Management Procedures
- (4) Satisfactorily pass a written examination on the subjects covered with a grade  $\geq 80\%$
- (5) Satisfactorily pass an oral examination administered by the utility

All six McGuire based Shift Advisors had satisfactorily fulfilled these program requirements based on the review of the training records.

The evaluation team reviewed the training provided to the McGuire based Shift Advisors for system differences and emergency procedures. The licensee stated that with regard to system differences, a listing of all systems was reviewed by two Catawba training personnel who were previously licensed and experienced at McGuire as an Operating Engineer and Control Room Operator in order to determine those systems which would be different between the two plants. The Plant Summary Manuals for each plant were then compared to determine the specific differences. The specific differences were then compiled and used in conjunction with the Catawba training lesson plan for the particular system to provide the required training. A review of two systems,

which were not identified by the licensee as containing differences, was conducted by the evaluation team (Safety Injection System and Main Steam Systems). No significant differences were noted.

The instructor who taught the system differences course for the Auxiliary Feedwater System was interviewed by the evaluating team and he explained during this interview how this particular course was developed and taught and what material was covered during the course using the plant summary manuals, system differences compilation and Catawba Auxiliary Feedwater Lesson Plan. The instructor's responses during this interview were considered to be acceptable.

The licensee stated that with regard to emergency procedures, each McGuire based Shift Advisor was provided a copy of all Catawba Symptom Oriented Emergency Procedures for self study, lectures were provided on selected emergency procedures with regard to content and format, and simulator training was provided for LOCA Events, Steam Line Break Events, Steam Generator Tube Rupture Events, and a Loss of Heat Sink event. The licensee considered this training to be acceptable since the role of Shift Advisor is envisioned to provide experience-based knowledge rather than procedure-based knowledge.

During this evaluation, the McGuire based Shift Advisors were performing procedure validations for the McGuire Symptom Oriented Emergency Procedures at McGuire Nuclear Station and would continue to perform these validations as part of their normal requalification program at McGuire.

Interviews with three of the six McGuire based Shift Advisors on the overview, format, and technical details of the Catawba emergency procedure for "Inadequate Core Cooling" demonstrated that each advisor interviewed was proficient in the technical details and use of this symptom oriented procedure. The evaluation team concluded that the training provided to the McGuire based Shift Advisors was acceptable.

h. Written and Oral Examinations and Interview of Oral Examiner

The written and oral examinations, which were administered to the six McGuire based Shift Advisors, were reviewed for content and grading by a Region II Operator License Examiner. The questions covered were found to be at the Reactor Operator (RO) rather than the Senior Reactor Operator (SRO) level. This was considered to be sufficient since the operator license examiner concluded that the type of system differences which exist are more appropriately tested on the Reactor Operator level instead of Senior Reactor Operator level. The oral examination questions were very similar to the written examination questions. The operator license examiner considered that this condition was acceptable for a person fulfilling a Shift Advisor role. The examination grading was reviewed in all six cases and determined to be satisfactory by the Operator License Examiner. All examinees satisfied the licensee criteria for passing the examinations. An interview with one oral



examiner was conducted by the evaluation team in order to determine his qualifications for conducting oral examinations. The individual was a licensed SRO and had six years experience as a training instructor at Catawba.

i. Shift Advisor Interviews

The inspectors interviewed three of the six McGuire based Shift Advisors and one of the two Catawba based Shift Advisors. The interviews were conducted to ascertain knowledge of shift advisor responsibilities, expected interfaces with the operational crew, adequacy of shift advisor training, proficiency in use of Symptom Oriented Emergency Procedures, and technical proficiency with the Catawba Symptom Oriented Emergency Procedure for Inadequate Core Cooling. Each Shift Advisor interviewed understood his responsibilities and interfaces with the operational crew. Additionally, each Shift Advisor considered the plant specific training he had received to be satisfactory and each appeared confident in his role as Shift Advisor.

Each Shift Advisor was able to proficiently explain how to use Symptom Oriented Emergency Procedures. With regard to technical proficiency of the Inadequate Core Cooling Emergency Procedures, the performance of the three McGuire based Shift Advisors interviewed was very good to excellent and the performance of the Catawba based Shift Advisor interviewed was marginally satisfactory.

It is noted that the Catawba based Shift Advisor had not read this particular emergency procedure within the past eight months; however, the Shift Advisor would be conducting procedure walkthroughs on this and all other emergency procedures as part of Cold License Certification Training. As noted earlier in this report, completion of emergency procedure walkthroughs for Catawba based Shift Advisors is planned to be completed prior to Shift Assignment. The evaluation team considers that this action will eliminate the weaknesses noted during this particular interview.

j. Conclusions

The inspection team concluded that:

- (1) All Shift Advisors exceeded the licensee stated qualification requirements.
- (2) The criteria contained in the proposal by the Industry Working Group presented to the Commissioners on February 24, 1984, by Mr. J. H. Miller of Georgia Power Company and Mr. D. F. Schnell of Union Electric Company; as clarified by a letter from Chairman N. J. Palladino to Mr. J. H. Miller of Georgia Power Company dated June 14, 1984, are met or exceeded by the licensee. "The Catawba Nuclear Station Shift Advisor Program" approved by G. Vaughn on

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May 4, 1984, properly describes the duties and responsibilities of the Shift Advisors subject to incorporation of recommendations of the Utility Advisor Evaluation Team.

- (3) Subject to recommendations of the Utility Advisor Evaluation Team and our own recommendations below, the training program, including quizzes and examinations, administered to the Shift Advisors is adequate to assure that the advisors will have sufficient knowledge of the Catawba systems, procedures, and Technical Specifications to properly perform their duties. Further, the training program acceptably covers the duties, responsibilities, and the limitations of the Shift Advisors.
- (4) The Shift Advisors are comfortable with and have a positive attitude towards their duties and understand how to interface with the operating crew.
- (5) Subject to implementation of the recommendations noted below, the evaluation team concludes that the Catawba based and McGuire based Shift Advisors are adequately trained and qualified to perform their assigned duties as Shift Advisor at Catawba Nuclear Station.

k. Recommendations

- (1) The inspectors agreed with the licensee that the eight recommendations of the Utility Advisor Evaluation Team review of June 6-8, 1984, should be incorporated into the Catawba Shift Advisor Program.
- (2) The Shift Advisors should meet the same medical criteria as required for licensed plant operators. In particular, the two Catawba based Shift Advisors should undergo licensing medical examinations prior to shift assignment. The licensee has agreed with this recommendation.
- (3) The two Catawba based Shift Advisor should complete Cold License Certification Emergency Procedure walkthroughs on all emergency procedures prior to Shift Assignment. The licensee agreed with this recommendation.

Within the areas inspected, no violations or deviations were identified.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

AUG 25 1984

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NO. 50-413/84-45

Thank you for your response of June 29, 1984, to our Notices of Violation and Deviation issued on May 29, 1984, concerning activities conducted at your Catawba facility under NRC Construction Permit No. CPPR-116. We have evaluated your responses and found that they meet the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

We appreciate your cooperation in this matter.

Sincerely,

*R.C. Lewis*  
Richard C. Lewis, Director  
Division of Reactor Projects

cc: R. L. Dick, Vice President -  
Construction  
J. W. Hampton, Station Manager  
James L. Kelley, Chairman  
Atomic Safety and Licensing  
Board  
Dr. Paul W. Purdom  
Administrative Judge  
Dr. Richard F. Foster  
Administrative Judge  
Robert Guild, Esq.  
Palmetto Alliance  
Jesse L. Riley  
Carolina Environmental  
Study Group

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Julian

SUMMARY OF FINDINGS ON OPERATOR QUALIFICATIONS

1. Approximately 50% of candidates who have taken NRC initial licensing exam have failed.
2. Essentially no prior BWR operating experience on Grand Gulf staff. Qualifications of GE advisors uncertain.
3. Operator requalification training program was not implemented until April 1983. Initial NRC exams were given in October 1981.
4. NRC evaluation of MP&L requal program in August 1983 revealed problems. One of three operators failed our portion of the exam. Their exams were judged to be too easy.
5. Significant weaknesses identified for three of ten operators given walkthru evaluations by NRC in early November 1983.
6. Certifications on qual cards have been found to be incomplete and have apparently not always been based on proper evaluations.
7. Operator weaknesses identified by Grand Gulf exams have not always been corrected.
8. Many deficiencies have been found in the management of the Grand Gulf operator training program.
  - The MP&L Training Dept. is understaffed. Current staff includes only two MP&L employees. There has been little oversight or appraisal of Quadrex instructors by MP&L.
  - License applications have overstated the amount of training given to applicants.
  - Training records are incomplete.

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#### ITEMS TO BE RESOLVED

1. Unit is presently in Cold Shutdown. At what point should low power operation be resumed? Is power level a consideration for issuance of licenses on hold/reinstatement of licenses?
2. Can operator licenses be issued/reinstated after the individual has been recertified by MP&L?
3. Operators will be taken off-shift to participate in training program. Should the OTEC Board certify each individual in training prior to placing that individual back on shift?
4. STA and shift advisor training

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

*Deke*

February 22, 1985

Tennessee Valley Authority  
ATTN: Mr. H. G. Parris  
Manager of Power and Engineering  
500A Chestnut Street Tower II  
Chattanooga, TN 37401

Gentlemen:

SUBJECT: REPORT NOS. 50-390/85-07 AND 50-391/85-07

On January 28-31, 1985, NRC inspected activities authorized by NRC Construction Permits Nos. CPPR-91 and CPPR-92 for your Watts Bar facility. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Within the scope of the inspection, no violations or deviations were identified.

Should you have any questions concerning this letter, please contact us.

Sincerely,

*David M. Verrelli*  
David M. Verrelli, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Enclosure:  
Inspection Report Nos. 50-390/85-07  
and 50-391/85-07

cc w/encl:  
W. T. Cottle, Watts Bar Nuclear  
Plant Site Director  
E. R. Ennis, Plant Manager  
J. W. Anderson, Manager  
Office of Quality Assurance  
K. W. Whitt, Chief, Nuclear Safety  
Staff  
R. Pierce, Watts Bar Nuclear Plant  
Project Manager

cc w/encl continued: (See page 2)

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~~8503200146~~

2pp.

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cc w/encl:

D. L. Williams, Jr., Supervisor

Licensing Section

K. D. Mali, Project Engineer

D. B. Ellis, Project Engineer

G. Wadewitz, Construction Project  
Manager

M. J. Burzynski, Regulatory  
and Engineering Section

AG2



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA ST., N.W.  
ATLANTA, GEORGIA 30323

Report Nos.: 50-390/85-07 and 50-391/85-07

Licensee: Tennessee Valley Authority  
500A Chestnut Street  
Chattanooga, TN 37401

Docket Nos.: 50-390 and 50-391

License Nos.: CPPR-91 and CPPR-92

Facility Name: Watts Bar 1 and 2

Inspection Conducted: January 28 - 31, 1984

Inspectors:	<u>[Signature]</u>	<u>2/4/85</u>
	B. T. Debs	Date Signed
	<u>[Signature]</u>	<u>2/4/85</u>
	W. K. Poertner	Date Signed
	<u>[Signature]</u>	<u>2/4/85</u>
	L. P. Modenos	Date Signed
Approved by:	<u>[Signature]</u>	<u>2/4/85</u>
	C. A. Julian, Section Chief	Date Signed
	Division of Reactor Safety	

SUMMARY

Scope: This routine, unannounced inspection entailed 75 inspector-hours on site in the areas of licensed and non-licensed operators training and requalification programs.

Results: Of the three areas inspected, no violations or deviations were identified.

~~8503200164~~  
12 pp.

A62



## REPORT DETAILS

### 1. Licensee Employees Contacted

W. Cottle, Site Director  
\*E. B. Ennis, Plant Manager  
\*B. S. Willis, Plant Superintendent  
\*W. S. Dulle, Station Coordinator  
\*R. C. Saner, Plant Compliance  
\*T. L. Howard, QA Supervisor  
\*R. Norman, Operations Supervisor  
\*H. A. Arnold, Section Supervisor Training BR  
\*H. J. Voiles, Training SE  
\*B. D. Varga, Training Officer  
\*J. Morgan, Engineering Associate  
\*S. Pindale, Training  
\*L. Sain, Assistant Chief Nuclear Training  
\*S. Anthony, Mechanical Engineer

NRC Resident Inspectors

\*W. E. Holland

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on January 31, 1985, with those persons indicated in paragraph 1 above. The licensee was informed of the inspection findings listed below. The licensee acknowledged the inspection with no dissenting comments. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspector during this inspection.

### 3. Licensee Action on Previous Enforcement Matters

- a. (Closed) Deviation (50-390/84-11-01, 50-391/84-09-01) Records Supporting Requests for NRC Senior Operator and Operator Licenses be maintained in the Watts Bar Master Files.

An inspector reviewed a letter from Oak Ridge National Laboratory to TVA Power Operations training Center dated February 2, 1984. This letter, now on file at the Watts Bar facility, documents the requisite 10 reactor startups for Docket Number 20161 (RO). Regarding deficient training information for Docket No. 8547 (SRO) and 20161 (RO), the licensee has revised operator license applications to delete this information or repeat the training if necessary.

The licensee has taken further action to record all requisite training on TVA Form 1453(s) maintained at Watts Bar. This information is now generated from TVA Form 3031 and 9880 maintained at TVA's Power Operation training Center. The inspector informed licensee management that the licensee's corrective action appeared to be adequate and that this action has closed the aforementioned violation.

- b. (Closed) Inspector Followup Item (50-390/84-11-02, 50-391/84-09-02) Verification of "Mitigation of Core Damage" training for Docket Number 20161 (RO) and 20163 (RO).

Licensee training personnel presented the inspector with completed TVA Forms 1453(s) for the aforementioned docket numbers. These forms documented "Mitigating Core Damage" training from February 23 to 24, 1984. This course consisted of 16 satisfactory hours. The inspector informed licensee management that the aforementioned documentation closes this Inspector Followup Item.

- c. (Closed) Violation (50-390/84-33-02, 50-391/84-28-02) Two Instances Of Incomplete "Observation Training Program Weekly Time Reports" As Required By Watts Bar Nuclear Station Operating Section Letter OSLT-1 Which, Itself, Was Deficient By Not Providing Any Acceptance Criteria.

The inspector reviewed journal entries and time sheets obtained by the licensee from the Sequoyah Nuclear Plant to substantiate the operational experience of the candidates in question. Additionally, the inspector was provided with documentation that one of the two individuals had been returned to the Sequoyah Nuclear Plant to assure complete substantiation of observation training. The other individual is scheduled to do the same starting February 11, 1985.

Regarding the lack of acceptance criteria aspect of the violation, the OSLT-1 "Observation Training Program Weekly Time Report" has been revised to include reactor operator verification of the hours spent by each candidate on each system with a final completion verification by either the Shift Engineer or Senior Reactor Operator which is consistent with Watts Bar Final Safety Analysis Report (FSAR) 15.2.3.1.4. The inspector informed licensee management that the licensee's corrective action appeared to be adequate and that this action has closed the aforementioned violation.

- d. (Closed) Violation (50-390/84-33-01, 50-391/84-28-01) Inaccurate Information Submitted on NRC Form 398(s).

The inaccurate information which appeared originally on the original submittal of NRC Form 398(s) has been corrected and the corrected NRC Form 398(s) were resubmitted to the NRC. The inspector selectively reviewed the licensee's latest submission of NRC Form 398(s) for Docket Numbers 5861, 20325, 20484, 20486, 20487, 20329, and 20488. The

inspector noted that there were no violations or deviations in this area. Additionally, the licensee's Quality Assurance Section conducted an audit of the applications before they were submitted to the NRC. The audit was performed under survey number WBN-AS 84-133 on August 10, 1984. The audit was performed in accordance with a prescribed checklist and all deficiencies were identified and the deficient applications were returned to the Operations Training Group for correction or resolution before submitting to the NRC. The inspector informed licensee management that their corrective action regarding this violation appeared to be satisfactory and that this violation is considered closed.

- e. (Closed) Inspector Followup Item (50-390/84-36-01, 50-391/84-36-01) "ANSI N45.2.9 Requirements for Vault Under Construction". TVA has made a revision to their commitment to ANSI-45.2.9-1974 and in their Topical Report, TVA-TR7 5-1 R7, has committed to ANSI-45.2.9-1979 which provides a floor drainage control by a floor drain and a check valve. The licensee constructed a vault facility in the Technical Services Office Building which is the permanent record repository for all plant records. The inspector toured the vault, reviewed ECN 4502, QA Topical Report and confirmed that the storage facility meets the ANSI Standard on control drainage.

#### 4. Requalification Training (41701)

The inspector reviewed the licensee's requalification training program for 1984 to determine conformance with the requirements of 10 CFR 55, the Watts Bar Final Safety Analysis Report and Watts Bar Procedure OSLT-1, Requalification Program for Licensed operators.

The Watts Bar Requalification Program consists of four weeks of training per year. A minimum of three weeks of this training is conducted at the Power Operations Training Center. Training is conducted by designated groups. Watts Bar presently utilizes a six-shift schedule with every sixth week devoted to training.

The inspector reviewed the 1984 annual written exams administered to the licensed operators (SRO and RO). The exams were structured in the same format used by the NRC and the questions were similar in format and difficulty to the questions asked in NRC requalification exams. No individuals failed the 1984 annual written examination. One SRO candidate failed an NRC administered SRO examination. This individual was reinstated into the requalification program and was administered the annual written examination, which he passed. The inspector reviewed selected training material used in the requalification training program. The inspector also reviewed the requalification records of selected SRO's and RO's.

The Watts Bar FSAR states: "A licensee may miss a total of 16 hours of training a year provided this individual scores at least 80 percent in each subject of the annual evaluation examination." Watts Bar Procedure OSLT-1

states: "A licensee is required to attend a minimum of 32 hours during each of his/her scheduled requalification weeks with a maximum of 24 hours missed provided he makes 80 percent in each subject of the evaluation examination." This inconsistency between the FSAR and the Watts Bar procedure was identified to the licensee and will be tracked as an inspector followup item (50-390/85-07-01 and 50-391/85-07-01).

In the area of Requalification Training, no violations or deviations were observed.

#### 5. Non-Licensed Employee Training

The inspector reviewed the overall training and retraining activities for non-licensed employees and general training for licensed employees to assure conformance with the licensee commitments.

The licensee keeps track of all training records on a computerized program identified as "Personnel Training Standard Report". This program provides information on the employee's name, position, required training, training dates and renewal date requirements. The inspector interviewed and reviewed several employees and verified that their personnel training files agreed with the computer printouts.

The inspector verified a portion of the General Employee Training (GET) by attending a class on GET-6 "Plant Procedures". A lecture was given with slides and a written examination was taken by all the employees present.

The following training procedures were reviewed and verified for compliance with licensee commitments.

- (a) AI-10.1, Rev. 6, "Plant Training Program" Administrative Instruction to establish the requirements and responsibilities for implementing the Plant Training Program.
- (b) ES SIL A11, Rev. 0, "Station Shift Technical Advisor Training"
- (c) Instruction Letter No. ENSL R4, Rev. 2, "Shift Technical Advisor Plant Familiarization Walkthroughs Instruction Letter No.
- (d) AI-2.16, "Shift Technical Advisor", Rev. 5
- (e) Instruction Letter No. ENSL R1, Rev. 5, "Reactor Engineering Unit Personnel Training"

In the area of nonlicensed employees and general training, no violations or deviations were observed.

#### 6. Proposed Shift Manning

By letters dated September 4, and September 20, 1984, TVA described its interpretation of the Near Term Operating License Utility Working Group's criteria on hot participation experience with respect to the initial shift crew for the Watts Bar facility. In a letter dated November 9, 1984, from NRC to TVA, two additional items were added to the aforementioned criteria to make it acceptable. License management indicated to the inspector that the aforementioned criteria is understood to be a commitment by Watts Bar to the NRC for the operational staffing of Unit 1. The inspector had no further comments.



2.1P. MODENOS

A62



**INSPECTOR'S REPORT**  
(Continuation)  
Office of Inspection and Enforcement

										NO	NSC
										A	VIOLATION SEVERITY OR DEVIATION
										B	1 2 3 4 5 6
										C	
										D	

VIOLATION OR DEVIATION DESCRIBE UP TO 2000 CHARACTERS FOR EACH ITEM. IF THE TEXT EXCEEDS THIS NUMBER, IT WILL BE NECESSARY TO DISCONTINUE. LIMIT SPACE TO 20 CHARACTERS EACH.)

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A62

BUCKET NO.

0-391

Watts B.R.

P. Fredrickson

LPM

2 170 185

ITEM NUMBER

4-111-01

TYPE

DEV

MODULE #

41701B

AREA

TRM

RESP.

507

ACTION DUE DATE

11-11-11

CLOSEOUT ACTION

85-07-11

CLOSED

DESCRIPTIVE TITLE

RECORDS SUPPORTING REQUESTS FOR MRC SENIOR OPERATOR AND  
PERATOR LICENSES

ITEM NUMBER

4-111-02

TYPE

IFAI

MODULE #

41701B

AREA

TRM

RESP.

507

ACTION DUE DATE

11-11-11

CLOSEOUT ACTION

85-07-11

CLOSED

DESCRIPTIVE TITLE

VERIFICATION OF "MITIGATION OF CORE DAMAGE" TRAINING

ITEM NUMBER

84-33-02

TYPE

V10

MODULE #

41701B

AREA

TRM

RESP.

507

ACTION DUE DATE

11-11-11

CLOSEOUT ACTION

85-07-11

CLOSED

DESCRIPTIVE TITLE

INCOMPLETE "DOB SEPARATION TRAINING PROGRAM WEEKLY TIME REPORTS"

ITEM NUMBER

84-33-01

TYPE

V10

MODULE #

41701B

AREA

TRM

RESP.

507

ACTION DUE DATE

11-11-11

CLOSEOUT ACTION

85-07-11

CLOSED

DESCRIPTIVE TITLE

INACCURATE INFORMATION SUBMITTED ON MRC FORM 398

Information entered by MFS on

by

Initials

A62

TABLE 1 (Rev. 10-69)

50-390

50-391

ITEM NUMBER

84-36-01

TYPE

IAI

MODULE #

B

AREA

RESP.

ACTION DUE DATE

CLOSEOUT ACTION

CS-07-01

DESCRIPTIVE TITLE

ANSI MAS-2.9 REQUIREMENTS FOR VAULT UNDER CONSTRUCTION

ITEM NUMBER

TYPE

MODULE #

B

AREA

RESP.

ACTION DUE DATE

CLOSEOUT ACTION

DESCRIPTIVE TITLE

ITEM NUMBER

TYPE

MODULE #

B

AREA

RESP.

ACTION DUE DATE

CLOSEOUT ACTION

DESCRIPTIVE TITLE

ITEM NUMBER

TYPE

MODULE #

B

AREA

RESP.

ACTION DUE DATE

CLOSEOUT ACTION

DESCRIPTIVE TITLE

Information entered by MTS on

/

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initials

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## INSPECTION SUMMARY

REPORT NO.(S) 85-07FACILITY WATTS BAR1. Areas Inspected (In Format for Summary Statement, Units Inspected)Inspected areas of licensed and non-licensed operators training and requalification program.2. New Compliances, Deviations

	<u>Number</u>	<u>Title</u>
a.		
b.		
c.		

3. New Unresolved Items, Licensee Identified Items

	<u>Number</u>	<u>Title</u>
a.		
b.		
c.		

4. New Inspected Follow-up Items, IEB's and IEC's

	<u>Number</u>	<u>Title</u>
a.	<u>50-390/85-07-01; 30-390/85-07-01</u>	<u>Inconsistency between FSAR and Training Procedure</u>
b.		
c.		

5. Status of Previous Inspection Findings

	<u>Number</u>	<u>Title</u>	<u>Status (Opened or Closed)</u>
a.			
b.			
c.			

6. Areas of Concern and/or Trends and Overall Assessment

	<u>Module Number</u>	<u>Percent Complete</u>	<u>Units Inspected</u>
a.	<u>41700</u>	<u>100</u>	<u>1 &amp; 2</u>
b.	<u>41701</u>	<u>100</u>	
c.			

Leo J. Anderson

Inspector's Signature

2/7/85

A62 Date

## SALP EVALUATION

### Instructions:

- (1) Complete one evaluation for each area inspected.
- (2) Complete the evaluations on site.
- (3) Include one copy of evaluations with inspection report draft.
- (4) 0-not inspected; 1-above average; 2-average; 3-below average

LICENSEE TVA FACILITY WATTS BAR UNIT 1 & 2

INSPECTOR DEBS, HODENOS, POEYER INSPECTOR HOURS \_\_\_\_\_ RPT NO/DATE \_\_\_\_\_

AREA INSPECTED TRAINING

ENFORCEMENT \_\_\_\_\_

### Evaluation Criteria

### Assessment

1. Management involvement in assuring quality	0	1	(2)	3
2. Resolution of technical issues from a safety standpoint	0	1	(2)	3
3. Responsiveness to NRC initiatives	0	1	(2)	3
4. Enforcement history	0	1	(2)	3
5. Reporting and analysis of reportable events.	0	1	(2)	3
6. Staffing (including management)	0	1	2	(3)
7. Training and qualification effectiveness	0	1	2	(3)

COMMENTS: \_\_\_\_\_

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ASSESSMENT OF AREA INSPECTED

0 1 (2) 3

\*NOTE: Please attach additional sheet if needed for comments.

AG2





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

February 10, 1984

Tennessee Valley Authority  
ATTN: Mr. H. G. Parris  
Manager of Power  
500A Chestnut Street, Tower II  
Chattanooga, TN 37401

Gentlemen:

SUBJECT: CONFIRMATION OF ACTION - WATTS BAR 1 AND 2  
DOCKET NOS. 50-390 AND 50-391

This letter refers to the meeting held at your request in this office on February 8, 1984, between members of your staff and NRC Regional office management.

Based on this meeting, we understand that the following actions have been or will be accomplished:

1. All pending reactor operator and senior reactor operator license applications, NRC Form 398, will be reviewed for accuracy and, if necessary, corrected and resubmitted to this office prior to our administration of license examinations.
2. Walk-through examinations will be administered to licensed reactor operators and senior operators and to applicants scheduled for NRC examinations. The ratio of examinees/examiners will not exceed three on any examination. Licensed individuals will be examined by June 1, 1984. *is this concern*
3. Candidates scheduled for the April 1984 examination by the NRC will complete the system walk-throughs, identified in 2 above, prior to the administration of that NRC examination.

The NRC will administer written license examinations on February 13, 1984. We will withhold issuance of operator licenses to those individuals who successfully pass the examination, until we have received your written verification of successful walk-through examinations as specified above.

If your understanding of our discussions is different from that stated above, please inform this office promptly.

Sincerely,

*James P. O'Reilly*  
James P. O'Reilly  
Regional Administrator

cc: (See Page 2)

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February 10, 1984

CAL-390/84-01

CAL-391/84-01

cc: J. A. Coffey, Director of  
Nuclear Power  
W. T. Cottle, Plant Superintendent  
G. Wadewitz, Plant Manager  
R. M. Pierce, OEDC Project Manager  
J. W. Anderson, Manager  
H. N. Culver, Chief, Nuclear  
Safety Review Staff  
D. L. Williams, Jr., Supervisor  
Licensing Section  
R. E. Teamer, Project Engineer

bcc: Senior Resident Inspector  
State of Tennessee  
Document Control Desk

RII *BT*  
BTDebs:bm  
02/8/84

RII *Ho*  
BAW:son  
02/8/84

RII *Ho*  
AFGibson  
02/8/84

RII  
JAW:shinski  
02/8/84

RII  
JWPuckett  
02/8/84

RII  
JAL:ian  
02/10/84

RII  
DM:Verrilli  
02/10/84

RII  
H:lewis  
02/10/84

RII  
RM:Verrilli  
02/10/84

FEB. 13 '84 10:39 MP&L NUCLEAR SERVICES JMW MS.

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Versyll  
Julian*

P.01

DATE:

2/13/84

*Time  
cyls*



MISSISSIPPI POWER & LIGHT COMPANY  
Nuclear Services Section

Telecopy Message

TO: Mr. G. P. O'Reilly, Regional Administrator  
Nuclear Regulatory Commission

FROM: Mr. G. P. McLaughlin, Jr.  
Vice President, Nuclear

TELECOPY NUMBER: (313) 423-1334

VERIFICATION NUMBER: (313) 423-1334

PAGES: 5 (including this cover sheet)

REGIONAL ADMINISTRATOR  
DEPUTY ADMINISTRATOR  
ASST TO ADMINISTRATOR

MP&L Telecopy Number DIRECTOR 69-2352 DEX 4100

Verification Number DIRECTOR 69-2678

DIRECTOR, EPMSP  
DIRECTOR, RMA

Operator: Judy Hughes

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MISSISSIPPI POWER & LIGHT COMPANY  
*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

JAMES P. McCAUGHY, JR.  
VICE PRESIDENT

February 11, 1984

Mr. J. P. O'Reilly, Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W., Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPP-13  
File: 0260/15521/0765  
Review of Training Not Included  
Within Scope of Recertification  
Program  
AECM-84/0100

On January 30, 1984, we met with Messrs. John Olshinski, David Verralli, and Caudle Julian of your staff and presented to them the results of a recent comprehensive review of MP&L's programs for training not included within the scope of the recertification program. The purpose of this letter is to summarize that review and its results, present our conclusions regarding the adequacy of these training programs, and discuss MP&L's plans to apply additional attention to certain program areas.

Each Nuclear Production Department organization was directed to perform a review of its training programs. The following objectives were set for those reviews:

- 6PP
- 1) Verify the commitments relating to training.
  - 2) Determine that training programs address all commitments;
  - 3) Verify the status of implementation of these training programs.

We determined the training commitments for Quality Assurance, Nuclear Services, and Nuclear Plant Engineering were broad commitments deriving from 10CFR50 Appendix B, the Operational Quality Assurance Manual (OQAM), the Policy and Organization Manual (POM), ANSI 18.1 - 1971 and other ANSI standards governing the particular responsibilities of these organizations. The Emergency Plan also specified certain training for members of these organizations who were also members of the offsite emergency organization. All other training requirements were internally imposed. From the review, it

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## MISSISSIPPI POWER &amp; LIGHT COMPANY

was concluded that Quality Assurance, Nuclear Services, and Nuclear Plant Engineering had training programs governed by approved, written procedures which addressed all relevant regulatory and internal commitments. In each organization the training was implemented, functioning, and generally current with only minor exceptions as to currency having been identified and tracked for prompt correction.

Additionally, the review revealed the training programs for these offsite organizations are scoped to go beyond the minimum regulatory requirements. Training programs in these organizations have been established to increase the technical competence of the professional staff. The training provided includes not only a strong emphasis on GGNs and BWR technology but also provides access to specialized technical training. Training relating to the MF&L Quality Assurance Program and the respective organization's procedures is also included. The management of each offsite organization is directly involved in establishing training requirements, providing training opportunities, and generally ensuring training programs are effectively implemented.

As expected, the majority of specific training commitments address training of Plant Staff personnel. Numerous commitments are found in FSAR Chapters 9, 12.1, 12.5, 13.2, 13.3, 13.6, 16, and 18. These commitments fall into the following categories:

- 1) General Employee Training including radiation protection, security, fire protection, and emergency training;
- 2) Fire protection and fire fighting organization training;
- 3) Security Force training;
- 4) Radiation worker and respiratory protection training;
- 5) Emergency Organization training;
- 6) Specialized training for maintenance, health physics, chemistry, and technical personnel.

The details relating the specific commitments, the training programs established to address those commitments, and the status of those programs were contained in the meeting presentation material, and those details will not be discussed again in this letter.

The review of Plant Staff training programs shows a commitment to provide diverse, detailed technical training to maintenance, health physics, chemistry, and technical personnel. The training programs place emphasis on GGNs and BWR technology. In addition, specialized technical training and vendor schools are continually provided to develop and maintain the technical competence and independence of the Plant Staff. The impact of the reorganization of the Training Section is becoming evident. Additional instructors have been added for health physics and chemistry training.

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## MISSISSIPPI POWER &amp; LIGHT COMPANY

An extensive revision of training programs for maintenance and non-licensed operators to address INPO guidelines has recently been completed and implemented. Actions are being taken to upgrade Emergency Plan Training. All of these things are positive indicators that MP&L does in fact have a strong, sustained commitment to training at GGNS.

As a result of our review, it was concluded that with three exceptions, which will be discussed more fully later, regulatory commitments have been addressed and are met by training programs set out in approved, written procedures. Sufficient numbers of personnel have completed the various training programs, and training continues to ensure adequate numbers of trained, qualified personnel are maintained.

As stated previously, three training areas were identified as requiring additional emphasis to achieve complete compliance with regulatory commitments. These areas are:

1. Emergency Plan Training - The Emergency Plan specifies in Table 8.1 that dose assessment training and damage control and repair training will be required for certain supervisory personnel. Plant Administrative Procedure 01-8-04-21, "Emergency Preparedness Training Program," did not recognize these commitments. This training is scheduled to be complete by February 22, 1984.

Prior to this review, the Emergency Planning Coordinator determined that Emergency Plan Training was not current for several members of the onsite emergency organization. This matter was brought to the attention of the Vice President - Nuclear, and a memo was issued directing that the necessary training be completed. In a parallel action, MP&L Quality Assurance identified the same deficiency, and Corrective Action Request (CAR) 813 was issued. Corrective action is scheduled to be complete by February 22, 1984 for non-licensed personnel. For licensed personnel, we intentionally did not disrupt the operator recertification effort which is nearing completion in order to retrain these personnel in emergency preparedness. However, upon completion of the recertification program, all licensed personnel will complete any necessary emergency preparedness training prior to exceeding 5% rated power on GGNS Unit 1.

2. Diesel Generator Training - FSAR 13.2.1.1.16 and FSAR 13.2.1.2.13 require special training on the diesel engines for non-licensed operating and maintenance personnel involved with the emergency standby diesel generators. We currently have a number of non-licensed operators and maintenance personnel who have completed both Delaval and HPCS diesel schools. Until all non-licensed operators and maintenance personnel are trained, administrative controls will ensure only qualified personnel or personnel under the direct supervision of qualified personnel will operate and maintain the diesel generators. Training procedures for non-licensed operators and maintenance personnel have been revised to include

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## MISSISSIPPI POWER &amp; LIGHT COMPANY

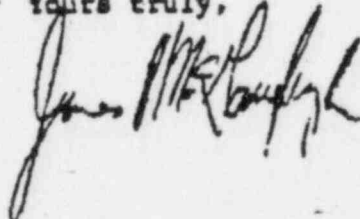
3. Required Reading - Chiefly to address FSAR 18.1.12, GGNS has a required reading program which provides information relating to operating experiences, plant changes, procedure changes, and the like, to operators and other plant personnel. The review indicated that while this large and complex program is generally functioning well, some sections of the plant organization are not current in required reading. Action is being taken to resolve these required reading backlogs in a timely manner.

In our review of MP&L procedural training requirements we noted that CAR 2054 had been written requesting that corrective action be taken to have Radwaste Operators complete their radwaste system qualification cards. All corrective actions relating to radwaste operator qualification cards are scheduled to be complete by February 21, 1984. It should be noted that the radwaste operator training and qualification program is an MP&L internal requirement aimed at meeting INPO guidelines. This program is not governed by any regulatory requirements.

Finally, FSAR 13.2.1.2.1, 13.2.1.2.2, 13.2.1.2.5, and 13.2.1.2.7 address training for selected personnel on control rod drive system maintenance, nuclear instrumentation, NSSS process instrumentation and control, and NSSS process computer. An adequate number of GGNS maintenance personnel have completed these various courses in order to meet the plant's needs. From this standpoint, the FSAR commitments are met. Maintenance practices direct that trained personnel be present during work on these special components. Administrative controls will ensure only qualified personnel or personnel under the direct supervision of qualified personnel perform complicated maintenance on these special components.

In conclusion, we believe the review clearly demonstrates that adequate training has been and continues to be provided. MP&L has expressed a strong commitment to training believing it is essential to safe and reliable plant performance. You are aware of the support and resources which MP&L has made available to the GGNS training organization. During 1984 Quality Assurance will perform one hundred percent audits of all licensed operator application training as well as normal audits of operator requalification training and other training programs that are the subject of this letter. Through these audits and through evaluations by INPO and ourselves, we will continue to monitor and control training to ensure our commitment to training excellence is undiminished. Should you have any questions, please call me.

Yours truly,



JFM:swb

cc: Mr. J. B. Richard  
Mr. R. B. McGhee  
Mr. T. B. Conner

Mr. Richard C. DeYoung, Director  
Office of Inspection & Enforcement  
U. S. Nuclear Regulatory Commission

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The inspector's concern has not been resolved by the above procedure revision. The responsibility for review of reports of violations of codes, regulations, orders, technical specifications, or operating license requirements having safety significance belongs to the Plant Safety Review Committee. This requirement is not qualified in any manner. This item will remain open pending PSRC review and concurrence of the reportability processes ensuring that the procedures are adequate for maintaining control of the process by PSRC.

## 12. Operator License Application

The inspector conducted a review of the training records of the six Senior Reactor Operators (SRO) candidates that were tested in September 1983. The areas reviewed were specified by NRC, Region II operator licensing examiners. The following comments were noted and reported to Region II.

- a. Verify SRO Certificates - There is no programmatic defined requirements for SRO certification. Thus certification could not be verified.
- b. Verify qualification card completion -
  - (1) MP&L identified items not completed for all candidates.
  - (2) qualification cards were not completed prior to on-shift training as required by administrative procedure 14-S-02-6, paragraph 5.3.4.
- c. Verify completion of supervisory training - This training was not completed as of the date of examination.
- d. Verify Critical Operation Experience Training for two candidates - This training was not completed as of the date of examination.

These items will be identified as inspector followup item 416/83-50-01. The completion of the items will be reviewed during a subsequent inspection.

During the review of current training for the license operator candidates the inspector reviewed Design Change Package (DCP) training. This training is given to ensure all operations personnel are aware and trained on changes to systems required for safe operation of the plant. This training is described in the Mississippi Power and Light Company's Operations Enhancement Program. The program was described to the NRC Region II Management on January 17, 1983, in an enforcement conference and formally submitted by letter AECM-83/0177 dated March 11, 1983. As a result of this review the inspector noted that DCP training had not been given to all on-shift operations personnel. MP&L's program commits to have this training completed by the next criticality which was achieved on September 25, 1983. On October 11, 1983, the inspector noted eight DCP's; 83-5006, Residual Heat Removal Pump Logic; 82-5091, Combustible Gas Control Instrument Setpoint Change; 82-4122, Containment Cooling Supervisory Module Change; 82-4137, Off-Gas Instrument Setpoint Change; 82-4138, Off-Gas Instrument Setpoint

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Change; 82-5094, Off-Gas Relay Setpoint Change; 83-0114, Instrument Air System Changes; and 82-5036 Standby Gas Treatment Instrument Setpoint Changes, for which training had not been completed. The failure to complete the DCP training prior to criticality on September 25, 1983, is a deviation from the Operations Enhancement Program commitment made to the NRC. This will be identified as Deviation, 416/83-50-02, failure to provide operator training on design changes to the plant.

13. Licensee Organization ← 83-03 VJO

On October 5, 1983, the inspector was informed of a reorganization that was placed in effect on October 1, which created three assistant plant manager positions and rearranged plant supervisory responsibilities. The inspector pointed out to licensee representatives that the new organization chart does not agree with Technical Specification Figure 6.2.2-1. The inspector stated that, although there appears to be no technical problem with the new organization, the technical specifications should have been changed prior to implementing the reorganization. Licensee representatives stated that a technical specification change had been requested by letter of September 9, 1983. The inspector verified, by conversation with NRR, that a change request had been submitted but was also told that NRR has several questions on the new organization and finds the statement "Changes to unit organization can be made without Technical Specification approval" which appears on the proposed new organization chart, to be unacceptable.

The present organization chart denotes those individuals required to hold a Senior Reactor Operator (SRO) license by the notation SRO in the organization box. This requirement is modified in the case of upper management personnel by an asterisk placed by their position referencing the footnote "must have been SRO or been certified SRO for a plant of this type". The inspector pointed out to licensee management that the current Technical Specification Figure 6.2.2-1 does not appear to have such an asterisk on the box of the Assistant Plant Manager, Nuclear. The individual presently holding this position has been certified at Grand Gulf but does not currently hold an SRO license; thus, it appears that there is a conflict with the current technical specifications. MP&L reviewed this matter and concludes that an asterisk is intended to be on the chart and was omitted at some stage by typographical error. Subsequent conversations with NRR support MP&L's contention.

These two examples of failure to meet the Technical Specification organization chart are an apparent violation (50-416/83-50-03).

DUKE POWER COMPANY

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

March 14, 1984

TELEPHONE  
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414

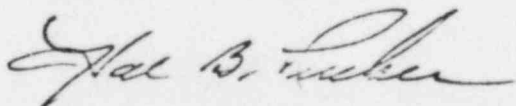
Dear Mr. O'Reilly:

As a result of audits by Duke personnel and discussions with NRC, Region II personnel, Duke has determined that corrective actions and/or enhancements for the operator training program need to be implemented to support licensing of Catawba operators. Attachments 1 through 5 identify deficiencies and proposed corrective actions for the following subject areas:

- 1) Comparison of course content for Cold Certification Group 6 to previous Cold Certification classes
- 2) Core damage mitigation and emergency procedure
- 3) Cold Certification task lists
- 4) Procedure walk-throughs conducted during license preparatory training.

Based on these actions, the revisions to the Catawba FSAR identified in my letter of February 10, 1984 are no longer needed and will not be-submitted in Revision 9 to the FSAR.

Very truly yours,



Hal B. Tucker

NAR/ROS/php

Attachments

cc: Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

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Mr. James P. O'Reilly, Regional Administrator  
March 14, 1984  
Page 2

cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Bruce Wilson  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135 1/2 Devine Street  
Columbia, South Carolina 29205

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

Attachment 1

COMPARISON OF COLD CERTIFICATION GROUPS 1 - 5  
TO GROUP 6 TRAINING

A review of the Cold License Certification Programs was performed with the following goals.

- 1) Determine differences in topical content in classroom phase;
- 2) Determine differences in simulator experience.

The review was performed in the following manner. Classroom schedules were obtained from Catawba training records and simulator "day-by-day" schedules were obtained from the Technical Training Center. Cold Certificate VI was used as a benchmark for comparison. A list of specific topics shown on the classroom schedule, simulator evolution performed, and classroom topics of special interest (i.e., TMI, S/G overfill, etc.) from the simulator schedule was generated. An item checklist was used to verify the degree of similarity between courses. In cases where a topic was not shown on the schedule, the examinations for that class were reviewed to verify course content.

The topic checksheets were reviewed for major differences between Cold Certification classes. Where significant differences appeared, the Cold License Preparatory schedules were reviewed to assure all license candidates had been exposed to topics/evolutions not covered in their certification classes, at a level consistent with current objectives.

The attached matrix outlines significant differences found. "X" indicates groups where documentation does not exist to verify training was given.

To compensate for these differences, identified classroom training will be administered prior to the written examinations and simulator training will be conducted prior to oral examinations.

# COMPARISON MATRIX

<u>Simulator Malfunction/Scenario</u>	<u>G1</u>	<u>G2</u>	<u>G3</u>	<u>G4</u>	<u>G5</u>
Loss of 125 VAC	X	X	X	X	
Inadvertent Phase 'A'	X	X	X	X	
Impulse Pressure Channel Failure	X	X	X	X	
S/G PORV leak				X	
Failure of ECCS to actuate	X	X	X	X	
Inadequate core cooling	X	X	X	X	
TMI	X	X			
St. Lucie	X	X	X	X	X
Ginna	X	X	X	X	X
Crystal River	X	X	X	X	X
PTS Review	X	X	X	X	X
<u>Classroom</u>					
TMI - 2 Incident	X	X			



CORE DAMAGE MITIGATION AND EMERGENCY PROCEDURE  
TRAINING DISCREPANCIES

No training documentation exists showing that G.A. Smith and M.W. Morgan participated in all mitigating core damage training that other applicants received. However, they have participated in review sessions on this topic.

We request they be allowed to sit for the written exam and receive the remaining training on mitigating core damage after the written exam and before the oral exam, which is consistent with the guidance contained in NUREG-0737.

Robert Ferguson missed approximately two and one half weeks of Segment IV, emergency operating procedures, of Cold License Preparatory training due to sickness. Mr. Ferguson was the individual responsible for overall development of the emergency procedures for Catawba Nuclear Station.

Mr. Ferguson will also serve as a verification team member during the procedure walk-through phase of training after the written examination. During the procedure walk-throughs he will have completed all the learning objectives that he missed during the emergency procedure training. As a result of the above, we request that Mr. Ferguson be exempt from the Emergency Procedure training that he missed and be allowed to sit for the written examination.

COLD CERTIFICATION TASK LIST DISCREPANCIES

The discrepancies identified as a result of ~~our~~ review of the Cold Certification task lists will be resolved and the resolutions will be documented prior to the oral examination.

The name of each individual that had discrepancies on their task list is listed below. In addition, each discrepancy and resolution or projected resolution is identified.

Jack B. Brisson -

Discrepancy:

Observe the following periodic tests:

A. Control Rod Drive movement test

Resolution:

During discussion with Mr. Brisson on 3/9/84, he indicated that he had observed the Control Rod Drive movement test at McGuire Nuclear Station during observation training

Discrepancy:

Observe the procedure used to acknowledge the following alarms:

B. Computer

Resolution:

Mr. Brisson had observed the procedure used to acknowledge both annunciator and computer alarms. The single signature indicates that both tasks were completed.

Rick Henry -

Discrepancy:

Observe the following periodic tests:

A. Control Rod Drive movement test

Resolution:

Mr. Henry did not observe this test during observation training. He will complete an evaluated walk-through on this periodic test at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Donald Bradley -

Discrepancy:

Assist a utility operator working in the following areas:

- C. Radioactive Waste Systems

Resolution:

Mr. Bradley did not perform this task during observation training. 2  
He will complete this task prior to the oral examination.

Discrepancy:

Calculate the following:

- C. Batch addition of Boric acid or demineralized water
- D. Feed and bleed or blend type borations or dilutions

Resolution:

Mr. Bradley did not perform these tasks. He will perform these tasks prior to the oral examination.

Thomas Moore -

Discrepancy:

Read a dosimeter.

Resolution:

This task was performed but not signed off the task list.

Discrepancy:

Assist a utility operator in the following areas:

- B. Auxiliary Building
- C. Radwaste Systems

Resolution:

Mr. Moore did assist the utility operator in the auxiliary building. 5  
However, he did not assist the utility operator in the radwaste systems area. This task will be completed prior to the oral exams.

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test

Resolution:

Mr. Moore did not observe this test during observation training. 4  
He will complete an evaluated walk-through on this test at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Thomas Beadle -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test.

Resolution:

During discussions with Mr. Beadle on 3/9/84, he indicated that he had observed the Control Rod Drive movement test at McGuire Nuclear Station during observation training.

David McIntosh -

Discrepancy:

Calculate the following:

- A. Estimated critical rod position
- B. Shutdown margin

Resolution:

During discussion with Mr. McIntosh on 3/9/84, he indicated that these tasks were performed.

Kenneth Beaver -

Discrepancy:

Observe the following tests:

- A. Control Rod Drive movement test
- B. Reactor Coolant leakage
- C. Periodic Instrument Surveillance

Resolution:

Tasks B and C were completed; however, Task A was not done. Mr. Beaver will complete an evaluated walk-through on Task A at Catawba Nuclear Station during the procedure walk-throughs after the written exam.

Discrepancy:

Observe the use of out-of-normal checklist or log.

Resolution:

During discussions with Mr. Beaver, he indicated that he had observed the use of the out-of-normal checklist while on observation training at McGuire Nuclear Station.

Discrepancy:

Calculate an estimated critical rod position.

Resolution:

Mr. Beaver indicated that he has performed an estimated critical rod position while in observation training.

Mike Morgan -

Discrepancy:

Most of the dates were not recorded on the first three pages.  
However, the designated signatures were recorded.

Resolution:

This item was discussed with Mr. Morgan on 3/9/84, and he indicated he had performed all of these tasks.

Mark Ravan -

Discrepancy:

Calculate the following:

- A. Estimated Critical Rod Position
- B. Shutdown Margin
- C. Batch addition of Boric Acid or Demineralized Water.
- D. Feed and Bleed or Blend type Borations or dilutions.

Resolution:

These items were discussed with Mr. Ravan on 3/9/84 and he indicated he had performed these items.

Tommy Kiker -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test
- B. Reactor Coolant Leakage Calculation test
- C. Periodic Instrument Surveillance test

Resolution:

These items were discussed with Mr. Kiker and he indicated that he has not performed them. He will complete an evaluated walk-through on these tests at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Discrepancy:

Observe the procedure used to acknowledge the following:

- A. Annunciator
- B. Computer

Resolution:

Mr. Kiker has indicated that he has not performed these tasks. They will be completed prior to the oral examination.

Stacy Cooper and Charlie Skinner -

Discrepancy:

Mr. Cooper and Mr. Skinner have no cold certification task lists because they were certified at the Westinghouse Training Facility in Zion, Illinois.

Resolution:

Mr. Cooper and Mr. Skinner will complete the cold certification task lists prior to the oral examination.

H. J. Nicholson -

Discrepancy:

Assist a UO working in the following areas

- A. Secondary side
- B. Auxiliary Building
- C. Radioactive waste systems

Resolution:

Mr. Nicholson had assisted a UO in the above areas. The single signature indicates all tasks completed.

Discrepancy:

Observe the following periodic tests:

- A. Control rod movement test

Resolution:

During discussions with Mr. Nicholson, he indicated that he had observed the Control Rod Movement test while at observation training at McGuire Nuclear Station.

Discrepancy:

Calculate the following:

- A. Estimated critical rod position
- B. Shutdown margin

Resolution:

During discussions with Mr. Nicholson, he indicated that he had calculated ECRP and SDM while at McGuire Nuclear Station.



Attachment 4

LICENSE APPLICANT QUALIFICATION VERIFICATION  
BY PROCEDURE WALK-THROUGHS

The Certification Team (CT) shall consist of the following:

1. Team Leader - Systems Nuclear Production Engineer from our General Office with extensive nuclear operations experience and prior SRO license.
2. Team Members - Operations personnel with extensive nuclear operations experience and holding an SRO on an operating station (McGuire).

The Certification Team (CT) shall conduct certification and oversight duties to commission a station Verification Team (VT).

The Certification Team (CT) Leader shall assign procedure certification responsibilities to Certification Team members in areas as follow:

Area - 1 - Emergency Procedures

Area - 2 - Operating Procedures

Area - 3 - Abnormal and Response Procedures

The (CT) member responsible for an area shall perform certification for all Verification Team members in assigned area.

The certification of a Verification Team (VT) member shall consist of a thorough walk-through of a minimum of one procedure in each area as follows:

1. Emergency Procedures (EP)
2. Operation Procedures (OP)
3. Abnormal Procedures (AP)
4. Response Procedures (RP)

The certification and subsequent verification of qualification shall conclude that the Verification Team members and license applicants are qualified on procedures.

Qualification of license applicants shall be conducted according to the Task Training List included as Attachment 5. The criterion for qualification on a procedure is license applicant comprehension of the following:

1. Purpose
2. Precautions and Limitations
3. Results/effects for a step or series of steps
4. Physical plant/control relationships

The Initial Verification Team consists of members as follow:

1. C. E. Muse                      Operating Engineer
2. M. J. Brady                    Shift Supervisor
3. C. H. Skinner                  Shift Supervisor
4. J. M. Hill                      Shift Supervisor
5. S. S. Cooper                   Shift Supervisor
6. D. Tower                       Operating Engineer (Backup)
7. J. R. Ferguson                Assistant Operating Engineer (Backup)

The Certification Team members may act as Verification Team members. Verification shall be conducted in groups consisting of one verifier to not more than three license applicants. This qualification process will be completed for this initial cold license group prior to the oral examinations. Certification of Verification Team members and verification of license applicant qualifications shall be documented.

The verification of qualification on specified procedures shall be conducted for all future license applicants.

CATAWBA NUCLEAR STATION  
TASK TRAINING  
COLD LICENSE PREPARATION

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Rev. 0

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_ Date Issued \_\_\_\_\_  
Job Classification \_\_\_\_\_ Date Revised \_\_\_\_\_

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
A. EP- Walk through EP's and subprocedures to become familiar with their purpose and content.		
1. EP/1/A/5000/01 - Reactor Trip or Safety Injection		
1A - Reactor Trip Response		
1A1 - Natural Circulation Cooldown		
1B - SI Termination Following Spurious SI		
1C - High-Energy Line Break Inside Containment		
1C1 - SI Termination Following High Energy Line Break Inside Containment		
1C2 - Post-LOCA Cooldown and Depressurization		
1C3 - Transfer to Cold Leg Recirculation		
1C4 - Transfer to Hot Leg Recirculation		
1C5 - Loss of Emergency Coolant Recirculation		
1C6 - LOCA Outside Containment		
1D - Steam Line Break Outside Containment		
1D1 - SI Termination Following Steam Line Break		
1E - Steam Generator Tube Rupture		
1E1 - Post - SGTR Cooldown and Depressurization		

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1E2 - SGTR Alternate Cooldown Using Backfill		
1E3 - SGTR With Continuous NC System Leakage - Subcooled Recovery		
1E4 - SGTR With Continuous NC System Leakage - Saturated Recovery		
1E5 - SGTR Without Pressurizer Pressure Control		
1E6 - SGTR Cooldown Using ND		
2. EP/1/A/5000/02 - Critical Safety Function Status Trees		
2A - Subcriticality		
2A1 - Nuclear Power Generation/ATWS		
2A2 - Loss of Core Shutdown		
2B - Core Cooling		
2B1 - Inadequate Core Cooling		
2B2 - Degraded Core Cooling		
2B3 - Saturated Core Cooling Conditions		
2C - Heat Sink		
2C1 - Loss of Secondary Heat Sink		
2C2 - Steam Generator Overpressure		
2C3 - Steam Generator High Level		
2C4 - Loss of Normal Steam Release Capabilities		
2C5 - Steam Generator Low Level		

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2D - Reactor Coolant Integrity		
2D1 - Imminent Pressurized Thermal Shock Conditions		
2D2 - Anticipated Pressurized Thermal Shock Conditions		
2D3 - High Pressurizer Pressure		
2E - Containment		
2E1 - High Containment Pressure		
2E2 - High Containment Sump Level		
2E3 - High Containment Radiation Level		
2F - Inventory		
2F1 - Pressurizer Flooding		
2F2 - Low System Inventory		
2F3 - Voids in Reactor Vessel		
3. EP/1/A/5000/03 - Loss of All AC Power		
3A - Loss of All AC Power Recovery Without SI Required		
3B - Loss of All AC Power Recovery With SI Required		
B. RP- Walk through the following RP's to become familiar with their purpose and content.		
1. RP/0/A/5000/01 - Classification of Emergency		
2. RP/0/A/5000/02 - Notification of Unusual Event		
3. RP/0/A/5000/03 - Alert		



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4. RP/O/A/5000/04 - Site Area Emergency		
5. RP/O/A/5000/05 - General Emergency		
6. RP/O/A/5000/06 - Natural Disaster		
7. RP/O/A/5000/07 - Earthquake		
8. RP/O/A/5000/08 - Release of Toxic or Flammable Gas		
9. RP/O/A/5000/09 - Collision/ Explosion		
10. RP/O/A/5000/10 - Conducting a Site Assembly		
11. RP/O/A/5000/11 - Offsite Dose Projections Without OAC		
C. AP- Walk through the following AP's and become familiar with their content.		
1. AP/1/A/5500/02 - Turbine Generator Trip		
2. AP/1/A/5500/03 - Load Rejection		
3. AP/1/A/5500/04 - Loss of Reactor Coolant Pump		
4. AP/1/A/5500/05 - ECCS Actuation During Plant Shutdown		
5. AP/1/A/5500/06 - Loss of S/G Feedwater		
6. AP/1/A/5500/07 - Loss of Normal Power		
7. AP/1/A/5500/08 - Malfunction of Reactor Coolant Pump		
8. AP/1/A/5500/10 - Reactor Coolant System Leak		

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9. AP/1/A/5500/11 - Inadvertent NC System Depressurization		
10. AP/1/A/5500/12 - Loss of Charging or Letdown		
11. AP/1/A/5500/13 - Boron Dilution		
12. AP/1/A/5500/14 - Control Rod Misalignment		
13. AP/1/A/5500/15 - Rod Control Malfunctions		
14. AP/1/A/5500/16 - Malfunction of Nuclear Instrumentation System		
15. AP/1/A/5500/17 - Loss of Control Room		
16. AP/1/A/5500/18 - High Activity In Reactor Coolant		
17. AP/1/A/5500/19 - Loss of Residual Heat Removal System		
18. AP/1/A/5500/20 - Loss of Nuclear Service Water		
19. AP/1/A/5500/21 - Loss of Component Cooling		
20. AP/1/A/5500/22 - Loss of Instrument Air		
21. AP/1/A/5500/23 - Loss of Condenser Vacuum		
22. AP/1/A/5500/24 - Loss of Containment Integrity		
23. AP/1/A/5500/25 - Spent Fuel Damage		
24. AP/0/A/5500/31 - Estimate of Failed Fuel Based on I-131 Concentration		

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25. AP/O/A/5500/33 - Damaged or Missing Tamper Seals on Special Nuclear Material Shipments			
D. OP-	Walk through and become familiar with the following Operating Procedures	N/A	N/A
1.	OP/1/A/6100/01 - Unit Startup		
	a. Mode 4 Checklist		
	b. Pre-heatup Checklist		
	c. Mode 3 Checklist		
	d. Mode 1 & 2 Checklist		
	e. Precriticality Checklist		
2.	OP/1/A/6350/01 - Normal Power Checklist		
	a. Normal electrical alignment.		
3.	OP/1/A/6150/01 - Fill and Vent of NC System		
	a. Filling NC System in C.R.		
	b. Venting NC System		
4.	OP/1/A/6200/09 - CLA Operation		
	a. Alignment for SS Actuation		
	b. Level/Pressure Changes		
5.	OP/1/A/6200/04 - Residual Heat Removal System		
	a. Startup of ND During Cooldown		

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b. Shutdown and Alignemnt for Standby Readiness		
c. Establlishing ND PZR Spray		
d. Alternate Power to 1ND-37A and 1ND-1B Shifting ND Trains.		
6. OP/1/A/6400/05 - KC		
a. System Startup and Shutdown		
b. Shifting Trains and Parallel Operation		
7. OP/1/A/6250/01 - CM/CF		
a. Condensate Startup		
b. Feedwater Startup		
c. Feedwater Pump Startup and Shutdown		
d. CM/CF Shutdown		
e. Condensate Storage System Operations		
8. OP/1/A/6450/01 - Cont Ventilation System		
a. Startup, Operation and Shutdown		
9. OP/1/A/6200/06 - NI		
a. Placing in Standby Readiness		
b. Removing from Standby Readiness		

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10. OP/1/A/6200/10 - UHI		
a. Adjusting Pressures and Levels		
b. Operation of Hydraulic Isolation Valves		
c. Placing and Removing From Service		
11. OP/1/A/6200/07 - NS		
a. Placing NS in Standby Alignment		
b. Removing NS From Standby Alignment		
12. OP/1/A/6200/14 - FW		
a. Normal Operation		
b. Makeup to FWST		
c. Purification of FWST		
13. OP/1/A/6200/01 - Chemical and Volume Control System		
a. Establishing Charging and Seal Injection		
b. Establishing Letdown and Securing ND Letdown		
c. Shifting Mixed Bed Demine- ralizers & Saturations of Mixed Bed		
d. Establishing Securing Excess Letdown		

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e. Shifting the Operating Charging Pump		
f. Shifting Charging Flow Paths		
g. Operation of NV Auxiliary Spray		
14. OP/1/A/6150/02A - Reactor Coolant Pump Operation		
a. Startup, Operation and Shutdown of NCP's		
b. Filling and Draining of NC Pump Standpipes		
15. OP/1/B/6300/01 - Turbine Generator		
a. Turbine Generator Startup		
b. Transferring Manual/Auto Modes		
c. Shutdown of turbine generator.		
16. OP/1/A/6100/03 - Unit Operation		
a. Load Changes from 15% to 100%.		
17. OP/1/A/6100/02 - Controlling Procedure for Unit Shutdown		
a. Unit Shutdown		
18. OP/1/A/6250/02 - Auxiliary Feedwater System		
a. Placing/Removing Standby Readiness		
b. Pump Operations		



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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
19. OP/1/A/6100/05 - Unit Fast Recovery		
20. OP/1/A/6150/08 - Rod Control		
a. Startup, paralleling and shutdown of Control Rod drive M-G sets.		
b. Dropped Rod Retrieval		
21. OP/1/A/6350/02 - Diesel Generator Operation		
a. Alignment for ES Actuation		
b. Local Startup and Shutdown		
c. Remote Startup and Shutdown		
d. Emergency Step		
e. Removing/Returning From Service		
f. Shutdown After Auto Start		
22. OP/1/A/6450/10 - Containment Hydrogen Control Systems		
a. Alignment for Standby Operation		
b. Operations After LOCA		
23. OP/1/A/6450/15 - Containment Purge System		
a. Purge System Operations		
24. OP/1/A/6450/17 - Containment Air Release and Addition		
a. Addition and Release Modes		

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25. OP/1/A/6700/03 - Operating with OAC Out of Service		
26. CP/1/A/6100/04 - S/D From Outside Control Room From Hot Standby to Cold S/D.  a. Shutdown and Cooldown		
27. OP/1/A/6700/01 - Unit Data Book  a. Index		
28. OP/0/A/6550/17 - Fuel Component Handling Tools  a. New Fuel Tool  b. New Rod Control Tool  c. RCC Thimble Plug Tool  d. BPRA Tool		
29. OP/0/A/6550/09 (RCCA Change Fixture Operations)  a. RCC Assembly Transfer  b. RCC Assembly Storage  c. RCC Assembly Removal From Storage		
30. OP/0/A/6550/08 - Fuel Trans- fer System Operation  a. Startup of Fuel Transfer System  b. Transfer of Fuel Assemblies Rx/SFP  c. Securing Fuel Transfer System		

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31. OP/O/A/6550/07 - Reactor Building Manipulator Crane Operation		
a. Startup of Manipulator Crane		
b. Fuel Mast & RCC Mast Operation		
c. Transferring Thimble Plug With RCC Mast		
d. RCC Thimble Plug Handling Tool		
e. Securing Manipulator Crane		
32. OP/O/A/6550/04 - Transferring New Fuel to the Elevator		
a. Transfer of New Fuel to Elevator		
33. OP/1/A/6550/06 - Transferring Fuel With the Spent Fuel Manipulator Crane.		
a. Startup of the Spent Fuel Pool Manipulator Crane		
b. Transferring Fuel		
c. Securing the Spent Fuel Pool Manipulator Crane		
34. OP/O/A/6550/16 - Overhead Fuel Building Cranes		
a. Inspection of 10/125 Ton Crane		

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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
b. Operation of 10/125 Ton Crane		
c. Shutdown		
d. Operation of Digital Weight Indicator		
e. Inspection of Wire Sling Rope		
35. OP/1/A/6100/09A - Annunciator Response for 1A D/G Panel		
36. OP/1/A/6150/04 - Pressurizer Relief Tank		
a. Establishing Normal Operating Conditions		
b. Level Adjustment		
c. Cooling		
d. Venting and Purging		
37. OP/1/A/6150/09 - Boron Concentration Control		
a. Modes of Makeup to NV System		
b. Boric Acid Tank Operation		
38. OP/1/A/6150/10 - Loose Parts Monitoring		
39. OP/1/A/6200/05 - Spent Fuel Cooling System		
a. Startup and Normal Operation		
b. Shutdown		
c. Makeup		
d. Skimmer Loop Operation		

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40. OP/1/A/6200/12 - Reactor Makeup Water System		
a. Alignment for Operation		
b. Makeup		
c. Recirculation		
41. OP/1/A/6250/06 - Main Steam		
a. Alignment for Unit Heatup		
42. OP/1/A/6250/08 - Steam Generator Blowdown		
a. Establishing Blowdown		
b. Securing Blowdown		
43. OP/1/A/6350/03 - Alternate AC Power Sources		
a. 13.8 KV		
b. 6.8 KV		
c. 4160 V		
d. 600 V		
44. OP/1/A/6350/08 - 125 VDC/ 120 VAC Vital Instrument and Control Power System		
a. Charger Operation		
b. Inverter Operation		
c. Battery Equalization Charge		
45. OP/1/A/6350/01 - Diesel Generator Fuel Oil System Operation		
a. Normal Alignment		
b. Filling Storage Tanks		

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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
c. Draining Storage Tanks		
d. Recirculating Storage Tanks		
e. Shifting Storage Tanks		
f. Condensate Removal From Storage Tanks		
46. OP/1/B/6100/10X - Annunciator Response For Radiation Monitor Panel 1RAD-1		
47. OP/1/B/6100/10Y - Annunciator Response for Radiation Monitor Panel 1RAD-2		
48. OP/1/B/6100/10Z - Annunciator Response for Radiation Monitor Panel 1RAD-3		
49. OP/0/A/6400/06C - Nuclear Service Water System		
a. Startup		
b. Shutdown		
c. Starting/Securing Additional Pumps		
50. OP/0/A/6450/03 - Auxiliary Building Ventilation System		
a. Startup and Operation		
b. Shutdown		
51. OP/0/A/6450/05 - Instrument Air System		
a. Startup/Shutdown of Compressors		
b. Shifting Compressor Modes		
c. Startup/Shutdown of Dryers		



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52. OP/O/A/6500/19 - Operations Waste Gas Release		
53. OP/O/B/6500/14 - Operations Liquid Waste Release		
54. OP/O/B/6100/13 - Standby Shutdown Facility Operations		
a. Unit 1 to Hot Standby		
b. SSF on Loss of All AC Power		
55. OP/O/B/6400/02A - Fire Protection		
a. Startup and Normal Operations		
b. Draining Containment Header		
c. Reset of Various Types of Fire Valves		
56. OP/O/B/6400/03 - Low Pressure Service Water System		
a. Startup		
b. Shutdown		
c. Shifting Running Pumps		
d. RL Turnaround Valve Operations		
57. OP/O/B/6450/23 - Auxiliary Building Cooling Water System		
a. Startup		
b. Shutdown		
c. Shifting of Operating Equipment		