



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

NOV 27 1985

Docket No: 50-416

Mr. Jackson B. Richard
Senior Vice President, Nuclear
Mississippi Power and Light Company
P.O. Box 23054
Jackson, Mississippi 39205

Dear Mr. Richard:

SUBJECT: GRAND GULF NUCLEAR STATION (GGNS) UNIT 1 - TRAINING PROGRAM

By letter dated July 22, 1985, Mississippi Power and Light Company submitted proposed changes to the Final Safety Analysis Report (FSAR) Section 13.2 "Training" and the training requirements in Appendix 9B "Fire Protection Program." By letter dated September 11, 1985, the licensee submitted the GGNS Licensed Operator Requalification Training Procedure. This information was submitted for review prior to updating the FSAR and in response to Generic Letter 84-14, "Replacement and Requalification Training Programs."

The NRC staff has reviewed these submittals and finds that additional information is needed to complete its review. The staff's request for additional information is enclosed. Sections II, III.A, III.B and III.C of the enclosure provide comments and requests for additional information regarding the proposed revisions to the FSAR. Since the updated FSAR, including the proposed revisions, is scheduled to be submitted December 1, 1985, it will not be possible to complete our review of the proposed revision in time to change the updated FSAR submittal. Therefore, your letter responding to the enclosed request should provide changes to the updated FSAR. Until the staff has completed its evaluation of the proposed FSAR revisions, the GGNS training program should continue to follow the current FSAR criteria and commitments.

In order to meet our present review schedule, you are requested to provide a response to the Enclosure Sections II, III.A, III.B and III.C by December 31, 1985. The response to Enclosure Section III.D, which contains requests for information regarding the requalification training program, should be provided after INPO accreditation has been obtained and a revised training procedure acceptable to INPO has been developed. The revised requalification training procedure should also be submitted.

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Mr. Jackson B. Richard

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If you cannot meet this date, please advise the NRC Project Manager, L. L. Kintner within 7 days of receipt of this letter.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosure:

As stated

cc w/enclosure:

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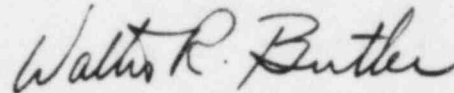
Mr. Jackson B. Richard

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If you cannot meet this date, please advise the NRC Project Manager, L. L. Kintner within 7 days of receipt of this letter.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

A handwritten signature in cursive script that reads "Walter R. Butler".

Walter R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing

Enclosure:
As stated

cc w/enclosure:
See next page

Mr. Jackson B. Richard
Mississippi Power & Light Company

Grand Gulf Nuclear Station

cc:

Robert B. McGehee, Esquire
Wise, Carter, Child, Steen and Caraway
P.O. Box 651
Jackson, Mississippi 39205

Nicholas S. Reynolds, Esquire
Bishop, Liberman, Cook, Purcell
and Reynolds
1200 17th Street, N.W.
Washington, D. C. 20036

Mr. Ralph T. Lally
Manager of Quality Assurance
Middle South Services, Inc.
P.O. Box 61000
New Orleans, Louisiana 70161

Mr. Larry F. Dale, Director
Nuclear Licensing and Safety
Mississippi Power & Light Company
P.O. Box 23054
Jackson, Mississippi 39205

Mr. R. W. Jackson, Project Engineer
Bechtel Power Corporation
15740 Shady Grove Road
Gaithersburg, Maryland 20760

Mr. Ross C. Butcher
Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Route 2, Box 399
Port Gibson, Mississippi 39150

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission,
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

Mr. J. E. Cross, General Manager
Grand Gulf Nuclear Station
Mississippi Power & Light Company
P.O. Box 756
Port Gibson, Mississippi 39150

The Honorable William J. Guste, Jr.
Attorney General
Department of Justice
State of Louisiana
Baton Rouge, Louisiana 70804

Mr. Oliver D. Kingsley, Jr.
Vice President, Nuclear Operations
Mississippi Power & Light Company
P.O. Box 23054
Jackson, Mississippi 39205

Office of the Governor
State of Mississippi
Jackson, Mississippi 39201

Attorney General
Gartin Building
Jackson, Mississippi 39205

Mr. Jack McMillan, Director
Solid Waste
Mississippi State Board of Health
880 Lakeland
Jackson, Mississippi 39206

Alton B. Cobb, M.D.
State Health Officer
State Board of Health
P.O. Box 1700
Jackson, Mississippi 39205

President
Claiborne County Board of Supervisors
Port Gibson, Mississippi 39150

GRAND GULF NUCLEAR STATION
REVISED FSAR SECTION 13.2
REQUEST FOR ADDITIONAL INFORMATION

I. Introduction

In a July 22, 1985, letter, Mississippi Power and Light Company (MP&L) submitted a revised FSAR Section 13.2, Grand Gulf Nuclear Station (GGNS) Staff Training Program. This submittal was in response to Generic Letter 84-14. An early review was requested to assure this section would be incorporated in the December 1, 1985, updated FSAR. In addition to the revised Section 13.2, the July 22, 1985, submittal contained a summary description of Section 13.2 changes and an evaluation of the safety significance of the FSAR changes; changes to the training requirements in FSAR Appendix 9.B, Fire Protection Program, and a summary description and evaluation of the safety significance of changes to Appendix 9B.

Based on our review of the revised FSAR, we conclude that GGNS training programs are in a transition period evolving from initial licensing and plant start-up to long term replacement and retraining programs. During this transition period, GGNS will be preparing for accreditation by INPO in accordance with the Commission Policy Statement on Training and Qualifications.

The current FSAR contains a number of general and specific commitments for training personnel at GGNS. Attempts were made to integrate some of the FSAR commitments in the revised FSAR with the accreditation process. However, the DHFS and Region position is that the commitments are still valid and may be omitted only after experience has been gained with accreditation and the programs are revised based on evaluation. Our comments are divided into general and specific concerns.

II. General Comments

1. Course Duration

In the revised FSAR, MP&L has omitted individual segment duration and provided only an estimate of the total course duration. The MP&L position is that utilizing a systematic approach to training, currently advocated by the NRC, the course duration is not important if the course material has been covered and satisfactory performance demonstrated.

In general, the staff agrees with this premise; however until 10 CFR 55 is revised licensed applicants must abide by requirements in the current version of 10 CFR 55 and must submit NRC Form 398, Personal Qualifications Statement-License, which requires the number of weeks enrolled and other requirements, in each segment of the training program. Therefore, MP&L should establish individual segment "duration" for the training program. As more experience is gained by successful completion of current and future training programs, the course duration may be modified. The staff recommends that facility certification for each licensing class contain the segment course projected duration and the actual course duration in the individual's application. Please refer to specific comments for additional information.

2. Evaluation and Criteria

The revised licensed program omits methods of evaluation and passing criteria for written examinations. The simulator and in-plant training segments needs some method of evaluating student's progress and completion of each segment. Current and future programs that receive accreditation require a method of evaluation as indicated in the essential elements of acceptable training programs in the Policy Statement.

Licensed training should reference passing criteria for written examinations. Reference to NRC criteria contained in revised Section 13.2.2.1.4 is adequate.

3. Commitments for Specialized Training

The revised FSAR does not contain the details for specialized training on Emergency Diesel Generators (EDG). These commitments were incorporated in Amendment 50 of the FSAR. Although the revised FSAR references EDG training in the licensed and nonlicensed programs, the specific details remain a MP&L commitment. We request that MP&L provide some suitable reference in order to track these commitments or restate the EDG training in the revised FSAR.

III. Specific Comments

A. Licensed Operator Training

13.2.1.1.1 Licensed Operator Training Programs

GGNS has the option to license personnel as:

- ° Operators
- ° Senior Operators
- ° "Upgrade" Senior Operators (licensed operators at GGNS or a similar BWR)

MP&L estimate of a 42 week course for replacement operators and senior operators appears to reflect current industry practice. MP&L should evaluate the addition of an "upgrade" program for senior operators and include a course outline and estimate of course duration in the FSAR. In addition, as nonlicensed programs are upgraded to include more basic theory and systems training, GGNS may be able to reduce the course durations for licensed operator training.

13.2.1.1.3 Systems Operation Training

Several commitments contained in Amendment 47 should be included in the proposed revision. The commitments include:

- ° "Classroom presentations for each of the GGNS systems over which the licensed control room operator has control or cognizance."
- ° "Topics" a-j for each of the plant systems".

The reason for retaining these features in this segment is that it contains a more appropriate description of systems training for licensed personnel and that the "topics" can be compared to generic learning objectives. When GGNS is accredited and incorporates the "topics" into the training program, future FSAR revisions may delete the topics.

13.2.1.1.4 Simulator Training

At the time Amendment 47 revised the GGNS FSAR, Regulatory Guide 1.149 "Nuclear Power Plant Simulators for use in Operator Training" was not referred in Section 13.2 of the FSAR. Since GGNS now has a plant referenced simulator, LP&L should follow current rulemaking which involves operator training and simulators and update future revisions of the FSAR when the rule becomes effective.

13.2.1.1.5 Plant Training

We interpret the duration of this phase of the program to be a total of three months for licensed operator and senior operator candidates. Licensed candidates who are in this phase of the program should have no additional concurrent duties. The training need not be consecutive but may be distributed over the training cycle. This phase of the program should include reactivity manipulations as required in §55.10. Refer to general comments for evaluation of in-plant training.

13.2.1.1.6 License Examination Preparation

Attachment 2 refers to current GGNS practice for hot license candidates which has been approved by Region II. As requested by Generic Letter 84-14, include the reference correspondence in your response.

The current revision lacks provisions for retraining and the certification by the Plant Manager and Assistant Vice President-Nuclear Production. These features contained in Amendment 47 should be included in the revised program.

13.2.1.1.7 Supervisory Training for Senior Operators

Although the program description has been deleted, we believe the topics in Amendment 47 are appropriate. We also recommend this segment of the program be completed prior to or during the three months on shift so the candidate may have the opportunity to apply this knowledge. In addition, describe how this segment is evaluated.

13.2.1.1.9 BWR Refueling Training

This segment of the program should also include training for senior operators who will direct refueling activities as described in 10 CFR 50.54(m)(2)(iv).

13.2.1.1.11, 13-16 Preoperational Testing

We concur that the phases of preoperational and low power testing may be deleted from the FSAR. In FSAR Section 18.1.12, Procedures for Feedback of Operating Experience to the Plant Staff (I.C.5), MP&L developed a program to ensure operating experience would be incorporated into training and retraining programs in a timely manner. Has MP&L incorporated the operating experiences obtained during low power testing and current operations in the replacement training program? If the answer is affirmative, please provide examples.

13.2.1.1.12 Previous Nuclear Experience

We concur that previous nuclear training and experience at other facilities may satisfy the intent of portions of the programs outlined in the FSAR. The staff recommends that MP&L review Section 5.2.1.7, "Testing in Lieu of Training" of ANSI/ANS 3.1-1981 as an alternative method to evaluate past

experience thereby excusing individuals from segments in the program. Past experience and training of individuals are required information in license applications which will be reviewed by the Region II staff. Experience criteria is contained in NUREG-1021, Rev. 1, "Operator Licensing Examination Standards".

B. Nonlicensed Training

13.2.1.2 Training Programs for Nonlicensed Personnel

In this proposed section, MP&L does not include method(s) to be used to evaluate student performance, evaluation criteria or feedback into the training program. The NRC Policy Statement on Training and Qualifications indicates that trainee and program evaluation are essential element of an acceptable training program; therefore, they should be contained in the preamble to nonlicensed training and apply to all segments of nonlicensed training.

13.2.1.2.1 GGNS Management Training

We recommend the following addition: If not obtained by previous experience at GGNS, training should also include the GGNS Technical Specifications, past operating experience at GGNS and a suitable supervisory training program for this level of management.

13.2.1.2.2 Nonlicensed Operator Training Program

This segment presents course outline and duration for the second level of non-licensed operators (NOB) although course and time for entry level operators (AON) is included, the segment lacks course duration for the AON position. In addition, MP&L should evaluate course content for nonlicensed personnel to determine if those members who are assigned to the fire brigade have sufficient training to fulfill their role in assessment of plant safety-related systems as described in Section 9B.7.1 of Appendix 9B.

Please refer to General Comments regarding EDG training.

13.2.1.2.1-13.2.1.2.9, Amendment 47

With regard to deleting these paragraphs in Amendment 47:

- a) Why was the Station Nuclear Engineering Course deleted?
- b) The revised FSAR does not include technician training in Technical Specifications, facility procedures or the emergency plan. There is no explanation why these subject areas were deleted from the FSAR.

13.2.1.2.3-5 Revised FSAR

With regard to the revised sections:

- ° There is no reference to training in Mitigating Core Damage commensurate with responsibility (Refer to Item II.B.4 of NUREG-0737 and paragraph 18.1.2.2, Amendment 49 of the GGNS FSAR).
- ° Please refer to specialized training for EDGs.

13.2.1.2.6 Shift Technical Advisor (STA) Training Program

Comparing the STA program in Amendment 47, MP&L should explain:

- a) Why the original course duration of about 22 weeks has been decreased to 16 weeks
- b) Why training in Mitigating Core Damage is not included in STA training

- c) Future plans to use STAs as described in the last paragraph of 13.2.1.2.10 in Amendment 49
- d) Although Section 13.2.2.2.2 includes STA participation in an annual requalification program, there is no provision for evaluating STA performance in the program.

The staff recommends that STA retraining, particularly simulator exercises, be conducted with shift personnel.

13.2.1.3 General Employee Training

We recommend the paragraph in Amendment 47 requiring additional H. P. training for entry into radiation areas as required by 10 CFR 20 be included in the revised FSAR.

13.2.2 Retraining and Requalification Programs

The staff has not reviewed the revised retraining and requalification programs. However, in Section D of the RAI, we have provided comments to the September 11, 1985 letter which contained GGNS Licensed Operator Requalification Program.

C. Appendix 9B - Fire Protection Program

We have reviewed the training and personnel-related areas of the GGNS Fire Protection Plan utilizing Section III-I, Appendix R of 10 CFR Part 50. We conclude that additional information is required to complete our review.

9B.2.2.2 Plant Fire Chief

We are unable to determine the qualifications of the Plant Fire Chief. Since the Plant Fire Chief is responsible for developing training and qualifying members of the Plant Fire Brigade, the plan should include the Chief's qualifications (refer to Section I.1.b of Appendix R).

9B.2.2.4.1 Fire Brigade Leader

The second sentence should state an operator's license in lieu of an operating license.

9B.3 Qualifications of Personnel

Please reference the administrative procedure or similar document that establishes the training and qualification requirements for personnel responsible for maintenance and testing of the fire protection systems.

9B.7.1 Fire Brigade Personnel

- ° Regarding the minimum number of operating shift personnel who are not fire brigade members, it appears that the number of licensed personnel does not comply with the table in 10 CFR 50.54(m)(2)(i).
- ° The two fire brigade members who have been trained and are knowledgeable of safety systems should also be identified in 9B.2.2.4.2. Since these members are probably nonlicensed operators, MP&L should reference the qualified operators by title as stated in FSAR 13.2.2.

D. Requalification Training

In response to a staff request, MP&L in a letter dated September 11, 1985, submitted the GGNS Licensed Operator Requalification Program (01-S-04-2, Rev. 4 of November 5, 1984). This submittal is in response to Generic Letter 84-14. At the time of submittal, the requalification program was undergoing revision in preparation for INPO accreditation. DHFS and Region II have reviewed the Requalification Program and find, with several exceptions, the program meets the current criteria contained in Appendix A of 10 CFR Part 55 and NUREG-0737. In this RAI, the staff also requests clarification of some parts of the program and provides several recommendations. The

recommendations were developed from observations of other licensee's programs and does not constitute a regulatory requirement.

When the INPO accreditation review is complete, MP&L should respond to this section of the RAI and submit the revised program.

3.9 This reference contains the implementing procedure for the Licensed Operator Qualification Program. MP&L should review the following comments and responses to assure the implementing procedure continues to reflect the features contained in the program.

5.2 Since evaluations are conducted utilizing the GGNS simulator, we recommend that simulator evaluations be included in this section.

6.2 Requalification Program Participants

- ° With regard to instructors' participation in the requalification program, we concur with the concept of an appropriate requalification program and the use of guest lecturers. Licensed instructors need additional participation. Our comments are contained in Section 6.5.
- ° Personnel who are exempt from specific areas due to normal duties should be exempted by an administrative procedure which is approved by station management. For example, Section 6.3.3, Station Design Feature Awareness, is normally issued by the Operations Manager and his immediate subordinate; therefore, they may be exempt from this requirement.
- ° With regard to licensed personnel who have recently received a license, they should have been participating in the lecture series and On-the-Job portion of the program. In addition, recently licensed personnel may be exempt from the annual examination up to 6 months from the effective date of the license.

6.3.1 Lecture Series

- ° Our interpretation is that the six lectures will be repeated for all shift personnel. Staff personnel will also be required to attend lectures unless exempted by provisions contained in 6.2 or 6.3.6.
- ° In Section 18.1.12, Amendment 49, MP&L response to Item I.C.5 of NUREG-0737 included feedback from operating experience in the Required Reading Program. MP&L should evaluate if significant events from operating experience is a suitable topic to add to the lecture series.

6.3.2 Reactivity Control Manipulations

- ° With regard to control manipulations, the program lacks evaluations as described in Item I.A.2.1 of NUREG-0737 (Reference Item C.3, Enclosure 1 of the H. R. Denton letter of March 28, 1980). These evaluations should also be included in Section 6.7.8. MP&L should also consider a suitable practice period before conducting evaluations.
- ° Our review of other licensees' programs and actual events indicate a lack of practice for Senior Operators in the implementation of the Site Emergency Plan. MP&L should review simulator scenarios to insure that Senior Operators are given periodic practice in implementing the Site Emergency Plan and until they are relieved from duties by facility management.

6.3.5 Examinations

With regard to personnel who score less than 80% in a lecture series examination, our position is that retraining and reexamination be conducted in a timely manner. Therefore, remedial assignments and re-examination should be completed within a specified time period. If the individual does not achieve the passing criteria, management must consider the individual for accelerated training in Section 6.4.1.

6.3.6 Annual Regualification Examination

Written examination - We recommend a separate paragraph contain criteria for those personnel who may be exempted from attending lectures. In addition, since lectures in a particular subject may introduce new or revised material, instructors should evaluate if licensed personnel who are exempted would benefit from attendance at a lecture. Some licensees allow personnel to "test-out" in order to be exempted from attendance of lectures where new material is presented.

6.5 Regualification for Instructors

MP&L should consider an appropriate period for licensed instructors to participate in shift activities, preferably on a monthly basis.

6.6 Regualification of Inactive Operators

The NRC's current position concerning this area is in the revision to Regulatory Guide 1.8, "Personnel Selection and Training." During the interim, MP&L should consider inactive operators; become current in the regualification OJT; perform a period of licensed activities under supervision; and review of lecture series material before the administration of a written and/or oral examination. Certification by MP&L and NRC review is conducted in accordance with § 55.31(e).