



# MISSISSIPPI POWER & LIGHT COMPANY

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May 21, 1982

NUCLEAR PRODUCTION DEPARTMENT

U. S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Washington, D. C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station  
Units 1 and 2  
Docket Nos. 50-416 and 50-417  
File: 0260/L-350.0  
Transmittal of Corrections to SER  
AECM-82/209

Mississippi Power & Light Company (MP&L) has conducted a review of Chapter 17 of the Grand Gulf Safety Evaluation Report (SER) (NUREG-0831). This review has revealed certain items which require clarification due to organizational changes within MP&L.

Attached for your consideration is a proposed revision to SER Chapter 17. This revision is provided to clarify the organizational and programmatic policies outlined in MP&L's Operational Quality Assurance Manual, MPL-TOP-1A, which has been accepted by the NRC.

Should clarification of this recommended revision be required, please contact this office.

Yours truly,

L. F. Dale  
Manager of Nuclear Services

JHS/JGC/JDR:lg  
Attachment

cc: Mr. N. L. Stampley (w/a)  
Mr. R. B. McGehee (w/a)  
Mr. T. B. Conner (w/a)  
Mr. G. B. Taylor (w/a)

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

Mr. J. P. O'Reilly, Regional Administrator (w/a)  
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## 17 QUALITY ASSURANCE

### 17.1 General

The description of the quality assurance (QA) program for the operational phase of the Grand Gulf Nuclear Station, Units 1 and 2, is contained in Mississippi Power & Light Company's (MP&L) QA topical report, MPL-TOP-1A, Revision 2, "Operational QA Manual." Our evaluation of this QA program is based on a review of this information and discussions with representatives from MP&L and the NRC Office of Inspection and Enforcement. We assessed MP&L's QA Program for the operational phase to determine if it complies with the requirements of 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," the applicable QA related Regulatory Guides listed in Table 17.1, and the Standard Review Plan, Section 17.2, Rev. 1, dated February 1979, "Quality Assurance During the Operations Phase."

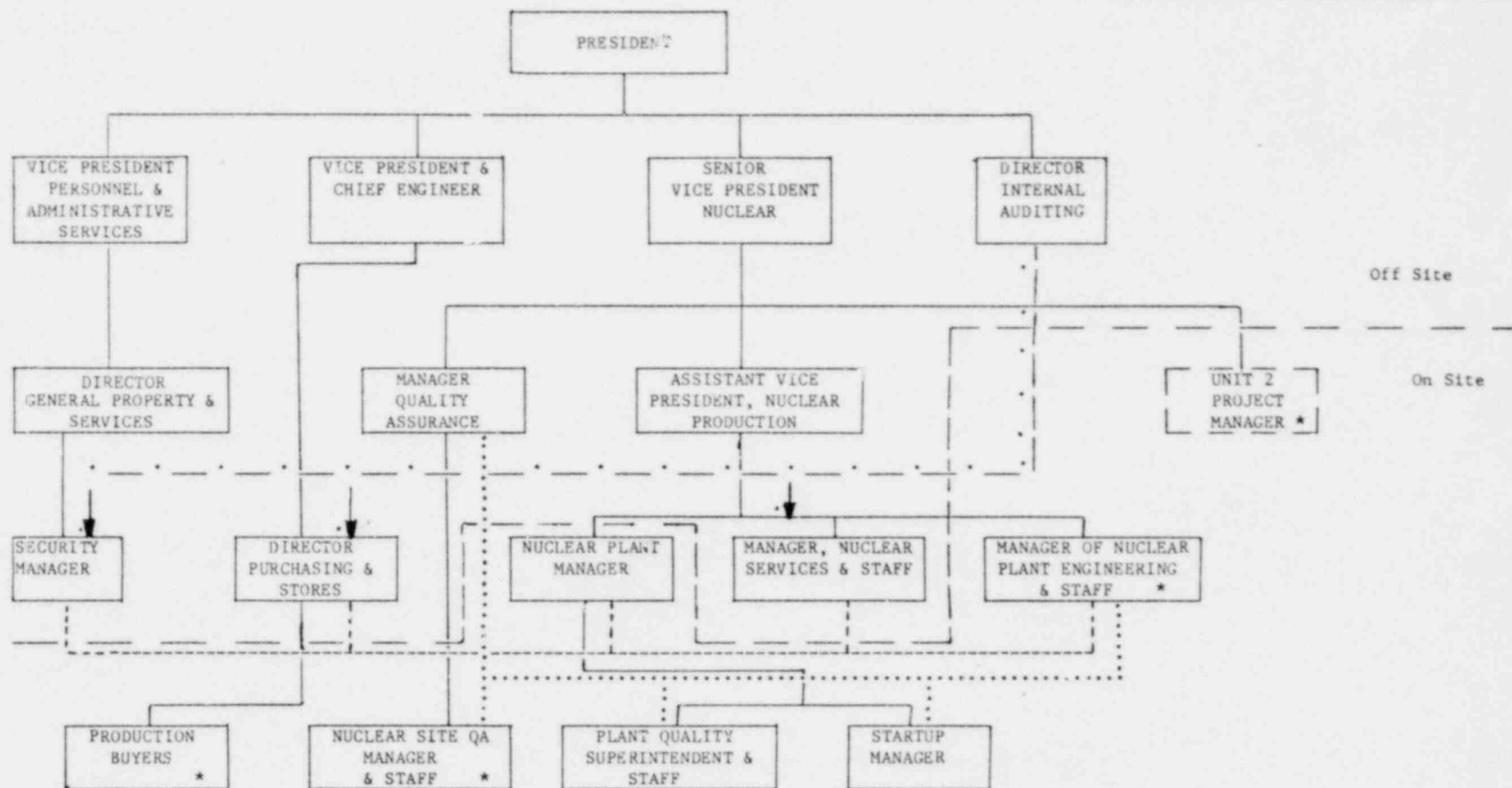
### 17.2 Organization

The structure of the organization responsible for the operation of Grand Gulf Nuclear Station, Units 1 and 2, and for the establishment and execution of the operational phase QA program is shown in Figure 17.1. The Senior Vice President - Nuclear, who reports to the President, has been delegated ultimate responsibility for the safe and reliable operation of the Grand Gulf Nuclear Station. He provides guidance and Corporate QA policies, goals, and objectives to the Manager of Quality Assurance.

The Manager of Quality Assurance reports directly to the Senior Vice - President - Nuclear and is delegated the overall responsibility for establishing, controlling, and verifying the implementation and adequacy of the QA program. He is assisted in carrying out his responsibilities by onsite (Nuclear Site Quality Assurance Manager and Staff) and offsite QA personnel.

The QA organization has the authority to identify quality problems; to initiate, recommend, or provide solutions through designated channels; to verify implementation of solutions; and to stop unsatisfactory work and to control further processing, delivery, or installation of nonconforming items in accordance with established procedures.

The QA organization, which verifies the effective implementing of the QA program, is given responsibility for: (1) providing QA input in the development of indoctrination and training programs for personnel performing quality-affecting activities; (2) reviewing, and approving or concurring with specified quality-related documents (e.g., procedures, instructions, and Q-list); (3) performing required audits to assure that personnel qualifications are current and applicable to the work being performed; (4) performing designated reviews to assure that design and procurement documents include applicable QA requirements; (5) performing pre-award evaluation of suppliers and source inspection at the suppliers' facilities; (6) assuring corrective actions are effective and accomplished in a timely manner; and (7) conducting internal audits of station operations and external audits of suppliers.



LEGEND

- .....WORKING & QUALITY INTERFACE & DIRECT COMMUNICATION
- ..... TECHNICAL & ADMINISTRATIVE AUTHORITY
- ..... MANAGEMENT AUDITS
- .....WORKING INTERFACE & COMMUNICATION
- ..... ON SITE/OFF SITE BOUNDARY LINE

MP&L OPERATIONAL QUALITY ASSURANCE PROGRAM  
ORGANIZATION FIGURE 17.2-1

\* LOCATED PHYSICALLY ON SITE BUT  
CONSIDERED OFF-SITE WITHIN THE PROGRAM.

The Nuclear Plant Manager reports to the Assistant Vice President, Nuclear Production and is directly responsible for assuring the safe, reliable, and efficient operation of the plant and for assuring the implementation of MP&L's QA Program at the plant.

The Plant Quality Superintendent reports directly to the Nuclear Plant Manager and maintains a working interface and direct communication with the Manager of Quality Assurance and the Nuclear Site Quality Assurance Manager. The Plant Quality Superintendent is responsible for assuring implementation of MP&L's QA program at the plant. He independently evaluates and reports the status and effectiveness of the QA program at the station to the Nuclear Plant Manager and the Manager of Quality Assurance.

The resolution of disputes on any quality assurance matter arising between MP&L organizations are resolved by management of the involved organizations. If necessary, the Senior Vice President - Nuclear provides ultimate resolution.

### 17.3 Quality Assurance Program

The QA program for the operation of Grand Gulf Nuclear Station, Units 1 and 2, is described in Mississippi Power & Light Company's Operational Quality Assurance Manual and is supplemented by quality assurance procedures and instructions which provide the detailed instructions and checklists necessary to implement the QA program requirements. MP&L has committed its QA program for the operational phase to be in compliance with the provisions of the regulatory guidance provided by the NRC in Table 17.1 with the specific clarifications as noted in MPL-TOP-1A, Appendix A.

Procedures and instructions for implementing the QA program are contained in documents which are established and maintained by the Manager of QA and the Plant Quality Superintendent in compliance with applicable regulations, codes, and standards. The QA organization is responsible for assuring that procedures and instructions provide for complete and adequate QA requirements with sufficient reviews, source inspections, and audits by QA personnel to verify the effective implementation of the entire QA program.

MP&L's QA program requires that implementing documentation encompasses detailed controls for: (1) translating codes, standards, regulatory requirements, technical specifications, engineering and process requirements into drawings, specifications, procedures, and instructions; (2) developing, reviewing, and approving procurement documents, including changes; (3) prescribing all quality-related activities by documented instructions, procedures, drawings, and specifications; (4) issuing and distributing approved documents; (5) purchasing items and services; (6) identifying materials, parts, and components; (7) performing special processes; (8) inspecting and/or testing materials, equipment, processes or services; (9) handling, storing, and shipping of items; (10) identifying the inspection, test, and operating status of items; (11) identifying and dispositioning nonconforming items; (12) correcting conditions adverse to quality; (13) preparing and maintaining QA records; and (14) auditing of activities which affect quality.

The Manager of Quality Assurance is responsible for auditing the implementation of QA indoctrination and training programs to assure that persons involved in safety-related activities are knowledgeable in QA instructions and implementing procedures and demonstrate a high level of competence and skill in the performance of their quality-related activities.

Quality is verified through checking, review, surveillance, inspection, testing, and audit of work activities. The QA program requires that quality verification be performed by individuals who are not directly responsible for performing the actual work activity.

Inspections are performed with procedures, instructions, and/or checklists by inspectors who have been qualified and certified in accordance with applicable codes, standards, or licensing requirements.

The QA organization is responsible for the establishment and implementation of the audit program which includes both internal and external audits. Audits are performed in accordance with procedures by appropriately trained personnel not having direct responsibilities in the areas being audited. The audit function, which is conducted at scheduled intervals and/or on a random unscheduled basis, includes an objective evaluation of: the adequacy of and compliance with QA policies, procedures, and instructions; the adequacy of work areas, activities, processes, items, and records; the performance, training, and qualifications of the operating plant staff; the implementation of the nonconformance control and corrective action program; and the effectiveness of implementation of the QA program.

The QA program requires documentation of audit results and review by management having responsibility in the area audited to determine and take corrective action needed, if any. Followup audits are performed to determine that nonconformances are effectively corrected and that the corrective action precludes repetitive occurrences. Audit findings will be analyzed; adverse quality trends and the evaluations of effectiveness of the QA program will be reported to responsible management for review and assessment.

#### 17.4 Conclusions

Our review of MP&L's QA program description for the operational phase for Grand Gulf has verified that the criteria of Appendix B to 10 CFR 50 have been adequately addressed in Chapter 17 of the FSAR. This determination of acceptability included a review of the list of items to which the QA program applies.

The list of items was reviewed by the technical review branches to assure that safety-related items within their scope of review fall under the quality assurance program controls. Differences between the staff and the applicant regarding the list have been resolved to the staff's satisfaction. The list has been expanded to include safety-related items reflected in NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980. Therefore, the staff has no open items concerning the quality assurance program for operations or to what the program applies.

Based on our review and evaluation of the QA program description contained in MPL-TOP-1A, Revision 2 dated June 1981 for the Grand Gulf Nuclear Station, Units 1 and 2, and the organization changes documented in a letter (AECM-82/33) dated February 5, 1982, we conclude that:

1. The QA organization of MP&L provides: independence from cost and schedule (when opposed to safety considerations), authority to effectively carry out the operational QA program, and access to management at a level necessary to perform their QA functions.
2. The QA program describes requirements, procedures, and controls that, when properly implemented, comply with the requirements of Appendix B to 10 CFR 50, and with the acceptance criteria contained in Standard Review Plan Section 17.2.

Accordingly, the staff concludes that MP&L's description of the QA program, is in compliance with applicable NRC regulations.



Table 17.1 Regulatory Guidance Applicable to Quality Assurance Program

1. Regulatory Guide 1.8 (2nd Proposed Revision 2), "Personnel Selection and Training," (DRAFT 12/79).
2. Regulatory Guide 1.26-Rev. 3, "Quality Group Classification and Standards for Water, Steam and Radioactive Waste Containing Components of Nuclear Power Plant," (2/76).
3. Regulatory Guide 1.29-Rev. 3, "Seismic Design Classification," (9/78).
4. Regulatory Guide 1.30, "Quality Assurance Requirements for the Installation, Inspection, and Testing of instrumentation and Electrical Equipment," (8/11/72).
5. Regulatory Guide 1.33-Rev. 2, "Quality Assurance Program Requirements (Operation)," (2/78).
6. Regulatory Guide 1.37, "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants," (3/16/73)
7. Regulatory Guide 1.38-Rev. 2, "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants," (5/77).
8. Regulatory Guide 1.39-Rev. 2, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants," (9/77).
9. Regulatory Guide 1.58-Rev. 1, "Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel," (9/80).
10. Regulatory Guide 1.64-Rev. 2, "Quality Assurance Requirements for the Design of Nuclear Power Plants," (6/76).
11. Regulatory Guide 1.74, "Quality Assurance Terms and Definitions," (2/74).
12. Regulatory Guide 1.88-Rev. 2, "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records," (10/76).
13. Regulatory Guide 1.94-Rev. 1, "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants," (4/76).
14. Regulatory Guide 1.116-Rev. 0-R, "Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems," (6/76).
15. Regulatory Guide 1.123-Rev. 1, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants," (7/77).
16. Regulatory Guide 1.144-Rev. 1, "Auditing of Quality Assurance Programs for Nuclear Power Plants," (9/80).
17. Regulatory Guide 1.146, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants," (8/80).

Exceptions to Specific Regulatory Guides are discussed in MPL-TOP-1A, Appendix A.