

INTRODUCTION

This Manual describes the Operational Quality Assurance Program established to assure that nuclear power plants are operated in accordance with applicable regulatory requirements and in a manner which protects the public health and safety. The Operational Quality Assurance Program conforms to the criteria established in Appendix B to 10CFR50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," and to the Regulatory Position in applicable NRC Regulatory Guides and industry standards as delineated in Appendix A to this Manual. Guidance in the preparation of this Manual was obtained from the NRC's "Standard Review Plan" (NUREG-0800, formerly NUREG-75/087).

The Quality Assurance Program described herein is applicable to the Grand Gulf Nuclear Station (GGNS), and is referenced in Section 17.2 of the Updated Final Safety Analysis Report. The program applies to all operational phase activities that affect the safety-related functions of those structures, systems and components to prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public.

11

9206150129 920610
PDR ADOCK 05000416
P PDR

FOREWORD

This Manual prescribes the Operational Quality Assurance Program Policies to control operational phase safety-related activities for the Grand Gulf Nuclear Station. The program described in these Policies complies with the requirements of Appendix B to 10CFR50 and incorporates appropriate provisions of applicable industry standards and NRC Regulatory Guides, as delineated in Appendix A to this Manual.

Compliance with the requirements set forth in this Manual is mandatory for all personnel involved in safety-related activities for the Grand Gulf Nuclear Station.

Copies of this Manual are numbered for control and will be kept up-to-date by the issuance of revisions, as necessary. The Director, Quality is responsible for control of the Manual and issuance of revisions. The holders of the Manual are responsible for keeping their copy current by appropriately handling revisions. | 11

TABLE OF CONTENTS

<u>POLICY</u>	<u>TITLE</u>	<u>REV.</u>
Policy 1	Organization	11
Policy 2	Quality Assurance Program	11
Policy 3	Design Control	11
Policy 4	Procurement Document Control	11
Policy 5	Instructions, Procedures and Drawings	11
Policy 6	Document Control	11
Policy 7	Control of Purchased Material, Equipment and Services	11
Policy 8	Identification and Control of Material, Parts and Components	11
Policy 9	Control of Special Processes	11
Policy 10	Inspection	11
Policy 11	Test Control	11
Policy 12	Control of Measuring and Test Equipment	11
Policy 13	Handling, Storage and Shipping	11
Policy 14	Inspection, Test and Operating Status	11
Policy 15	Nonconforming Materials, Parts or Components	11
Policy 16	Corrective Action	11
Policy 17	Quality Assurance Records	11
Policy 18	Audits	11
Appendix A	Conformance of GGNS Operational Quality Assurance Program to NRC Regulatory Guides and ANSI Standards	11
Appendix B	Document Control Responsibility for Quality Related Documents	11
Appendix C	Operational Quality Assurance Program Implementing Procedures	11

1.0 ORGANIZATION

1.1 PURPOSE

This Policy describes the organizations and key personnel responsible for developing, implementing and verifying the effectiveness of the Operational Quality Assurance Program for the Grand Gulf Nuclear Station.

1.2 SCOPE

This Policy defines the organizational structure and delineates the authority, responsibility and lines of communication for organizations performing functions covered by the Operational Quality Assurance Program.

Certain of these functions may be delegated to other qualified organizations, but responsibility for the program is retained and exercised by the licensee.

1.3 ORGANIZATION AND RESPONSIBILITY

Clear and definitive lines of authority, responsibility and communication are established for all licensee organizations involved in the Operational Quality Assurance Program. These lines extend from the highest management level through intermediate levels to and including the onsite operating organization and offsite organizational elements.

The organizational structure and functional responsibility assignments are such that attainment of program objectives is accomplished by those who have been assigned responsibility for performing the work, and verification of conformance to established requirements is accomplished by qualified personnel who do not have responsibility for performing or directly supervising the work.

Organizational structure and lines of authority, responsibility and communication are depicted in the organizational charts included at the end of this Policy. The dashed line between the Director, Quality, and the Chairman & Chief Executive Officer indicates guidance on Quality Assurance policy matters and a direct escalation path. The dashed line from the Manager, Quality, to the Chairman and Chief Executive Officer indicates guidance on matters related to quality.

1.3.1 Chairman & Chief Executive Officer

Ultimate responsibility for providing top level direction of all activities associated with the safe and reliable operation of the Grand Gulf Nuclear Station rests with the Chairman & Chief Executive Officer of the Company. The Chairman & Chief Executive Officer provides guidance with regard to corporate quality assurance policy. He delegates authority and responsibility for the development, implementation and verification of the Operational Quality Assurance Program to the appropriate

11

1.3.1 (Continued):

organizations through the President and Chief Operating Officer, the Senior Vice President, Planning & Assurance and the Vice President, Administrative Services and Regulatory Affairs and the Vice President, Legal and External Affairs. He maintains a continuing awareness of quality assurance matters and monitors effectiveness of the program through status reports prepared by the Director, Quality and the Manager, Quality.

11

1.3.2 Vice President, Operations GGNS

The Vice President, Operations GGNS reports directly to the President and Chief Operating Officer and is responsible for the administration of all functions associated with the operation of the Grand Gulf Nuclear Station, except those delegated to the Vice President, Engineering, the Vice President, Administrative Services and Regulatory Affairs, The Vice President, Operations Support, and the Senior Vice President, Planning & Assurance. He is also responsible for training. He provides guidance with regard to quality assurance goals and objectives to the Director, Quality. He maintains a continuing awareness of quality matters through applicable reports and management audits of the program. It is the Vice President, Operations GGNS' responsibility to assure that the requirements of the Operational Quality Assurance Program are implemented by the organizations under his direction.

11

11

1.3.3 Director, Quality

The Director, Quality reports directly to the Vice President, Operations GGNS and is delegated the overall authority and responsibility for establishing, controlling and verifying the implementation and adequacy of the Operational Quality Assurance Program. This includes the establishment of quality assurance policies, goals and objectives. He is assisted by the Manager, Quality Services and the Manager, Quality Systems.

11

The primary duties and responsibilities of the Director, Quality include:

1.3.3.1 Developing and controlling the Operational Quality Assurance Program and the content of this Manual, including the approval of changes thereto and providing for interpretations thereof;

1.3.3.2 Directing the activities of the Quality Programs' Staff in verifying the implementation of the Operational Quality Assurance Program.

1.3.3 (Continued):

- 1.3.3.3 Reporting to the Vice President, Operations GGNS and the Chairman & Chief Executive Officer on the status and adequacy of the Operational Quality Assurance Program;
- 1.3.3.4 Reviewing and approving Quality Assurance Procedures;
- 1.3.3.5 Providing for review of and concurrence with documents as specified in Appendix B of this Manual;
- 1.3.3.6 Providing for the planning, scheduling and coordinating of training for the Quality Programs Staff; providing quality assurance input to the training and indoctrination programs for personnel performing quality-related activities; and providing for the approval of all Quality Programs Staff certifications.
- 1.3.3.7 Maintaining adequate communications with regulatory agencies, suppliers, contractors and other licensee organizations on quality assurance matters;
- 1.3.3.8 This section deleted in Revision 4.
- 1.3.3.9 Planning and performing receipt inspections;
- 1.3.3.10 Developing and carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements;
- 1.3.3.11 Providing for periodic review and analysis of NRC and licensee quality deficiency documents to detect possible adverse quality trends.
- 1.3.3.12 Providing for inspections and nondestructive examinations.
- 1.3.3.13 Providing for the coordination, development and issuance of quality assurance reports as required by Management and appropriate procedures.
- 1.3.3.14 Providing for the coordination and/or implementation of administrative services for Quality Programs.

The Director, Quality is independent of undue influences and responsibilities for schedules and costs, and has sufficient authority and organizational freedom to identify quality problems, recommend solutions and verify implementation of solutions. If acceptable solutions cannot be reached he has the responsibility and authority to escalate these matters to the Chairman & Chief Executive Officer. He has the authority,

11

11

1.3.3 (Continued):

as delineated in the appropriate Quality Assurance Procedure, to initiate action to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming items or continuation of nonconforming services pending correction of the nonconforming condition.

1.3.4 Manager, Quality Services

The Manager, Quality Services reports directly to the Director, Quality. He directs Quality Programs' staff in inspections, nondestructive examination, receipt inspections, procurement document reviews, and reviews of activities to verify implementation of the Operational Quality Assurance Program. | 11

The Manager, Quality Services has the authority to initiate action to stop unsatisfactory work and control further processing, delivery or installation of nonconforming items or continuation of nonconforming services pending correction of the nonconforming condition.

The primary duties and responsibilities of the Manager, Quality Services include:

- 1.3.4.1 Coordinating the review of procedures, as delineated in Appendix B to this manual to assure quality requirements are addressed.
- 1.3.4.2 Developing, interpreting and maintaining the Operational Quality Assurance Program and Procedure Manuals.
- 1.3.4.3 Controlling, processing, tracking, disposition concurrence, and verification of GGNS quality deficiency documents.
- 1.3.4.4 Analyzing NRC and licensee quality deficiency documents for trends and reporting results to the appropriate levels of management.
- 1.3.4.5 Providing for inspections and nondestructive examinations.
- 1.3.4.6 Serving as a primary member of the Plant Safety Review Committee.
- 1.3.4.7 Reviewing and approving Quality Assurance Instructions, as applicable.
- 1.3.4.8 Providing for the quality review of procurement documents;

1.3.4 (Continued):

1.3.4.9 Providing for the performance of receipt inspection activities.

1.3.5 General Manager, Plant Operations

The General Manager, Plant Operations reports to the Vice President, Operations GGNS and is delegated the responsibility and authority for assuring the safe, reliable and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. He supervises the operating plant staff; approves Plant Administrative Procedures; authorizes implementation of design changes and plant modifications; implements repairs; reports appropriate matters to management and the Safety Review Committee; and generally administers plant operations on a day-to-day basis. He has overall responsibility for execution of the Operational Quality Assurance Program at GGNS; except for training activities, licensing activities, implementation of design changes and plant modifications; and has the authority to stop work if an activity at the Plant is not in conformance with program requirements. He has overall responsibility for developing systems to manage the storage and retrieval of records and for coordinating the turnover of contractor vendor records. It is the responsibility of the General Manager, Plant Operations, to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

The General Manager, Plant Operations, is assisted in carrying out his responsibilities by the Manager, Plant Operations; the Manager, Plant Maintenance; the Manager, Materials, Purchasing and Contracts; and, Manager, Performance & System Engineering as well as the operating plant staff which includes individuals knowledgeable in plant radiation protection and plant security. In addition, the General Manager, Plant Operations oversees the activities of the Plant Safety Review Committee and provides for necessary liaison with the Safety Review Committee of which he is a member.

1.3.6 This Section deleted in Revision 4.

1.3.7 Director, Nuclear Safety and Regulatory Affairs

The Director, Nuclear Safety and Regulatory Affairs reports to the Vice President, Operations GGNS and is responsible for directing the activities of the Nuclear Safety and Regulatory Affairs Staff. The Nuclear Safety and Regulatory Affairs Staff is responsible for securing the licenses and permits required to operate the plant. The Nuclear Safety and Regulatory Affairs Staff also provides technical assistance in the areas of safety analysis and fire protection. This staff provides

11

11

1.3.7 (Continued):

support to the Vice President, Operations GGNS in matters related to Safety Review Committee activities. It is the responsibility of the Director, Nuclear Safety and Regulatory Affairs to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3.8 Director, Design Engineering GGNS

The Director, Design Engineering GGNS reports to the Vice President, Engineering, and is responsible for directing the activities of the Nuclear Plant Engineering Staff. Nuclear Plant Engineering, consisting of the Manager, Engineering Support; Principal Engineer, Civil; Principal Engineer, Electrical; Principal Engineer, Mechanical; and, their respective staffs and the Quality Engineer are responsible for plant design, design review, modifications, chemical/environmental analysis, special processes, and accident and transient analyses. It is the responsibility of the Director, Design Engineering GGNS to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program. The Director, Design Engineering GGNS is responsible for reviewing GGNS design documents for compliance with the Operational Quality Assurance Program requirements and concurring with the same.

11

1.3.9 Safety Review Committee (SRC)

Committee composition, responsibility and authority, subjects to be reviewed, administrative controls, and reporting requirements are addressed in Section 6 of the Technical Specifications and Section 13 of the UFSAR for the applicable nuclear generating station.

1.3.10 Plant Safety Review Committee (PSRC)

Committee composition, responsibility and authority, subjects to be reviewed, and reporting requirements are addressed in Section 6 of the Technical Specifications and Section 13 of the UFSAR for the applicable nuclear generating station.

1.3.11 This section deleted in Revision 10.

1.3.12 Other Organizations

Other organizations, contractors, or consultants may be delegated certain functions which fall under the Operational Quality Assurance Program. In such cases, the licensee shall retain responsibility for the delegated work.

1.3 (Continued):

1.3.13 Minimum Qualifications of Quality Personnel

The qualification requirements and experience levels of Quality personnel are such as to assure competence commensurate with the responsibilities of the position and are described in ANSI/ANS 3.1 (Draft 12/79). See Appendix A. Key Quality personnel include the Director, Quality; the Manager, Quality Services; the Manager, Quality Systems; and the Manager, Quality.

11

1.3.14 This section deleted in Revision 5

1.3.15 This section deleted in Revision 11

11

1.3.16 Director, Nuclear Support

The Director, Nuclear Support reports to the Vice President, Operations Support and is responsible for directing the activities of the Nuclear Support Department. The Nuclear Support Department provides technical support in the areas of environmental licensing and permitting; health physics; environmental protection; chemistry and waste management. It is the responsibility of the Director, Nuclear Support to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.17 This section deleted in Revision 5

1.3.18 Manager, Quality Systems

The Manager, Quality Systems reports directly to the Director, Quality. He directs Quality Programs' staff in audits and assessment activities to verify the adequacy and implementation of quality assurance programs established and implemented by the licensee and onsite vendors.

11

The Manager, Quality Systems has the authority to initiate action to stop unsatisfactory work and control further processing, delivery or installation of nonconforming items or continuation of nonconforming services pending correction of the nonconforming condition.

The primary duties and responsibilities of the Manager, Quality Systems include:

1.3.18 (Continued):

- 1.3.18.1 Providing for the planning, scheduling, coordinating, performing and reporting of audit activities.
- 1.3.18.2 Providing for the planning, scheduling, coordinating, performing and documenting of assessment activities. | 11
- 1.3.18.3 This section deleted in Revision 9a.
- 1.3.18.4 This section deleted in Revision 9a.
- 1.3.18.5 This section deleted in Revision 9a.
- 1.3.18.6 Reviewing and approving Quality Assurance Instructions, as applicable.

1.3.19 This section deleted in Revision 6.

1.3.20 This Section deleted in Revision 6A.

1.3.21 Vice President, Engineering

The Vice President, Engineering reports directly to the President and Chief Operating Officer and is responsible for the administration of all functions associated with engineering and fuel cycle management including control of design activities associated with nuclear core design of GGNS. He maintains a continuing involvement in quality assurance matters and assesses the scope, status, implementation and effectiveness of the program through contact with and review of reports issued by the Director, Quality. | 11

1.3.22 This section deleted in Revision 9.

1.3.23 Manager, Emergency Preparedness

The Manager, Emergency Preparedness reports to the Director, Plant Projects and Support and is responsible for the Emergency Preparedness program and associated activities. It is the responsibility of the Manager, Emergency Preparedness to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3 (Continued):

1.3.24 Manager, Nuclear Safety and Assessment

The Manager, Nuclear Safety and Assessment reports to the Director, Nuclear Safety and Regulatory Affairs. He is responsible for directing nuclear safety/thermal performance analyses, reliability reviews and safety evaluations and for making independent recommendations to improve both plant safety and reliability as delineated in the Operational Assessment Review Policy and Nuclear Regulatory requirements. The Manager, Nuclear Safety and Assessment is responsible for carrying out the activities of the Independent Safety Engineering Group (ISEG) as described in Technical Specification 6.2.3 and in accordance with the Operational Quality Assurance Program.

11

1.3.25 Manager, Project Management

The Manager, Project Management reports directly to the Director, Plant Projects and Support. He is responsible for managing the implementation of various major special projects and programs as may be periodically assigned. These projects involve hardware and software implementations and planning functions which involve multiple departments. He assists the Director, Plant Projects and Support as assigned, in technical and administrative matters associated with the Grand Gulf Nuclear Station. It is the responsibility of the Manager, Project Management to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.26 Manager, Plant Modification & Construction

The Manager, Plant Modification & Construction reports directly to the Director, Plant Projects and Support. He is responsible for planning, scheduling, and implementing design changes and plant modifications. He is also responsible for the implementation of assigned major maintenance. It is the responsibility of the Manager, Plant Modification & Construction to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.27 This section deleted in Revision 11.

11

1.3 (Continued):

1.3.28 Manager, Engineering Support (GGNS)

The Manager, Engineering Support (at GGNS) reports to the Director, Design Engineering GGNS and is responsible for managing the activities of the Configuration Management, Procurement Engineering, Drafting/Computer Aided Drafting and Engineering Planning and Control disciplines of the Nuclear Plant Engineering Staff to ensure that adequate support is given to the Civil, Electrical, and Mechanical disciplines for all phases of their engineering activities at Grand Gulf Nuclear Station. It is the responsibility of the Manager, Engineering Support to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3.29 Vice President, Administrative Services & Regulatory Affairs

The Vice President, Administrative Services & Regulatory Affairs reports directly to the Chairman & Chief Executive Officer and is responsible for the administration of all functions associated with Business Services and Materials, Purchasing and Contracts. He delegates authority and responsibility for the accomplishment of the above activities through the Director, Business Services and the Director, Materials, Purchasing and Contracts. It is the responsibility of the Vice President, Administrative Services and Regulatory Affairs, to assure these functions are performed in accordance with the Operational Quality Assurance Program.

11

1.3.30 Director, Business Services

The Director, Business Services reports directly to the Vice President, Administrative Services & Regulatory Affairs and is responsible for control and maintenance of corporate directives, policies and procedures; risk management coordination and administrative services. He delegates authority and responsibility through the Manager, Administrative Services. It is the responsibility of the Director, Business Services to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.31 President and Chief Operating Officer

The President and Chief Operating Officer reports directly to the Chairman and Chief Executive Officer. He is responsible for administration of all functions associated with the operating and engineering of GGNS and is assisted by the Vice President, Operations GGNS; the Vice President, Engineering; and the Vice President, Operations Support. It is the responsibility of the President and Chief Operating Officer to assure requirements of the Operational Quality Assurance Program are implemented by the organizations under his direction.

11

1.3 (Continued):

1.3.32 Vice President, Operations Support

The Vice President, Operations Support reports directly to the President and Chief Operating Officer, and is responsible for the administration of all support functions associated with radiological, radwaste, chemistry, operations, refueling outage management, environmental services, central licensing services, and maintenance services. He maintains a continuing involvement in quality assurance matters and assesses the scope, status, implementation and effectiveness of the program through contact with and review of reports issued by the Director, Quality. It is the responsibility of the Vice President, Operations Support to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3.33 Director, Plant Projects and Support

The Director, Plant Projects and Support reports to the Vice President, Operations GGNS and is responsible for planning, scheduling and implementing major maintenance; managing implementation of major special projects and programs; and emergency preparedness. Provides management direction to the Manager, Plant Modification and Construction; the Manager, Emergency Preparedness; and the Manager, Project Management. It is the responsibility of the Director, Plant Projects and Support to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.34 Senior Vice President, Planning & Assurance

The Senior Vice President, Planning & Assurance reports directly to the Chairman and Chief Executive Officer and is responsible for directing Supplier Quality Assurance and Services Quality Assurance activities. He delegates through his staff to assure that these activities are performed in accordance with the Operational Quality Assurance Program. He maintains a continuing awareness of quality matters through applicable reports and management audits of the program. It is the Senior Vice President, Planning & Assurance's responsibility to assure that the requirements of the Operational Quality Assurance Program are implemented by the organizations under his direction.

11

1.3 (Continued):

1.3.35 Manager, Quality

The Manager, Quality reports directly to the Senior Vice President, Planning & Assurance and is delegated the authority and responsibility for assuring the performance of supplier evaluations and source verification activities to verify the adequacy of quality assurance programs established and implemented by suppliers including suppliers of nuclear fuel and associated components. The Manager, Quality, is responsible for development, maintenance, control, and approval of procedures that govern supplier quality assurance and services quality assurance activities. He assures safety related activities are performed in accordance with the Operational Quality Assurance Program.

The primary duties and responsibilities of the Manager, Quality include:

- 1.3.35.1 Reviewing and approving Supplier Quality Assurance and Services Quality Assurance Procedures;
- 1.3.35.2 Maintaining adequate communications with suppliers, contractors and Entergy Operations' organizations;
- 1.3.35.3 Planning, scheduling, coordinating, and performing supplier evaluations and source verifications;
- 1.3.35.4 Developing and carrying out an audit program as described in Policy 18.0 of this manual, to verify conformance with the Operational Quality Assurance Program requirements;
- 1.3.35.5 Reporting to the Senior Vice President, Planning & Assurance and the Chairman & Chief Executive Officer on the status and adequacy of the Operational Quality Assurance Program as applicable to Supplier Quality Assurance activities;
- 1.3.35.6 Reviewing and approving the non-site specific quality assurance program to verify conformance with the Operational Quality Assurance Program;
- 1.3.35.7 Providing for the performance of pre-award evaluation of suppliers;
- 1.3.35.8 Providing for the control, processing, tracking, disposition, concurrence, and verification of deficiency documents documented in accordance with the Services Quality Assurance Manual and Supplier QA procedures.

11

1.3.35 (Continued):

The Manager, Quality, is independent of undue influences and responsibilities for schedules and costs, and has sufficient authority and organizational freedom to identify quality problems, recommend solutions and verify implementation of solutions. If acceptable solutions cannot be reached he has the responsibility and authority to escalate these matters to the Chairman & Chief Executive Officer. He has the authority to initiate action to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming items or continuation of nonconforming services pending correction of the nonconforming condition.

11

1.3.36 This section deleted in Revision 11.

1.3.37 Director, Maintenance Support

The Director, Maintenance Support reports to the Vice President, Operations Support and is responsible for directing the activities of the Maintenance Support Department. The Maintenance Support Department provides technical support in the areas of maintenance, system engineering, operations, and refueling outage management to the Grand Gulf staff. It is the responsibility of the Director, Maintenance Support to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3.38 Director, Central Licensing

The Director, Central Licensing reports to the Vice President, Operations Support and is responsible for directing the activities of the Central Licensing Department. The Central Licensing Department provides licensing support in the licensing area to the Grand Gulf Nuclear Safety and Regulatory Affairs staff. It is the responsibility of the Director, Central Licensing to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.39 Director, Materials Purchasing & Contracts

The Director, Materials Purchasing and Contracts reports to the Vice President, Administrative Services and Regulatory Affairs and is responsible for directing the activities of the Materials, Purchasing and Contracts Department. The Materials, Purchasing and Contracts Department provides technical support to GGNS Manager, Materials, Purchasing and Contracts. He delegates authority and responsibility through the Manager, Purchasing; the Manager, Contracts; the Manager, Material Control; and the Manager, Inventory, Purchasing & Contracts Analysis. It is the responsibility of the Director, Materials,

11

1.3.39 (Continued):

Purchasing and Contracts to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.40 Manager, Fuel Fabrication

The Manager, Fuel Fabrication, reports to the Director, Nuclear Engineering Analysis, and is responsible for the procurement of nuclear fuel (fabrication and related services, being the design authority for nuclear cycle fuel and core designs, and the direction of nuclear fuel cycle planning.

1.3.41 Director, Nuclear Engineering Analysis

The Director, Nuclear Engineering Analysis reports to the Vice President, Engineering and is responsible for directing the activities of the Nuclear Engineering Analysis Department. The Nuclear Engineering Analysis Department provides nuclear engineering analysis support in the fuel and core design area to Design Engineering GGNS and Performance and System Engineering. It is the responsibility of the Director, Nuclear Engineering Analysis Department to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.42 Principal Engineer, Mechanical

The Principal Engineer, Mechanical, is responsible for mechanical process designs/design modifications, HVAC designs/design modifications, piping supports, and materials science. In addition to classical design activities, the group provides consultation advice in all areas of mechanical engineering. It is the responsibility of the Principal Engineer, Mechanical to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.43 Principal Engineer, Electrical

The Principal Engineer, Electrical, is responsible for electrical designs/design modifications, electrical cable and equipment layout, electronic engineering, and instrumentation and control/control logic engineering. In addition to classic design activities, the group provides consultation advice in all areas of electrical and electronic engineering. It is the responsibility of the Principal Engineer, Electrical, to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3 (Continued):

1.3.44 Principal Engineer, Civil

The Principal Engineer, Civil, is responsible for structural engineering as required for ductwork supports, pipe supports, miscellaneous structures, etc. In addition, the group provides engineering capabilities in the area of environmental monitoring, wastewater engineering, fire protection engineering/design, seismic qualification of electrical equipment, and certain hydraulic engineering activities. It is the responsibility of the Principal Engineer, Civil, to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.45 Manager, Engineering Programs

The Manager, Engineering Programs, reports to the Vice President, Engineering, and is responsible for managing the activities of the Engineering Programs group. The Engineering Programs group provides engineering support to the GGNS Design Engineering Organization in the technical areas of welding, flaw evaluations, fracture mechanics, metallurgy and finite element analysis. The Manager, Engineering Programs, maintains an awareness of GGNS programs and generic issues in areas as assigned by the Vice President, Engineering, to identify best practices, facilitate peer group activities, and coordinate the development of standards, procedures, and programs between the Entergy Operations Nuclear facilities. It is the responsibility of the Manager, Engineering Programs, to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

11

1.3.46 Manager, Engineering Support (Corporate)

The Manager, Engineering Support, in the General Office reports to the Vice President, Engineering, and is responsible for managing the activities of the Engineering Support group. The Engineering Support group provides engineering support to the Design Engineering Organization in the technical areas of Configuration Management, Probabilistic Risk Assessment, and Procurement Engineering. The Manager, Engineering Support maintains an awareness of GGNS programs and generic issues in areas as assigned by the Vice President, Engineering, to identify best practices, facilitate peer group activities, and coordinate the development of standards, procedures, and programs between the Entergy Operations Nuclear facilities. It is the responsibility of the Manager, Engineering Support, (Corporate) to assure these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

Figure 17.2-2 Deleted in Rev. 8

2.0 QUALITY ASSURANCE PROGRAM

2.1 PURPOSE

This Policy describes the Operational Quality Assurance Program for the Grand Gulf Nuclear Station.

2.2 SCOPE

This Policy describes the Operational Quality Assurance Program in terms of the objectives to be accomplished, the requirements to be met, and the implementation and control mechanisms which have been established. The total program is described throughout this Manual.

2.3 APPLICABILITY

The requirements of the Operational Quality Assurance Program apply to all individuals or organizations performing functions during the operational Phase which affect the quality of safety-related structures, systems, components or services.

Operational phase functions to which the program applies include: designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, auditing, operating, maintaining, repairing, refueling, and modifying (Except major modifications which may be excepted and covered under an NRC accepted construction Quality Assurance Program per OQAM 3.5.18. See Appendix A).

11

2.4 POLICIES, DIRECTIVES, GOALS AND OBJECTIVES

Licensee quality assurance policies, directives, goals, and objectives are summarized in the statement that all licensee individuals and organizations who perform quality-related activities have responsibility to assure that the Grand Gulf Nuclear Station is designed, constructed and operated in a manner which protects public health and safety, and promotes reliable and efficient operation.

The Operational Quality Assurance Program is designed to provide the mechanism for assuring that these policies, goals, and objectives are achieved.

2.5 PROGRAM DESCRIPTION

The Operational Quality Assurance Program, as described throughout this Manual, delineates the measures that assure activities which affect the quality of safety-related structures, systems, components and services are performed in a controlled manner and are sufficiently documented to provide objective evidence of compliance with established requirements.

The Operational Quality Assurance Program is documented by written policies, procedures, and instructions; and shall be carried out throughout the life of the plant in accordance with these policies, directives, procedures, and instructions. These documents convey the

2.5 (Continued):

licensee quality assurance philosophy and requirements to all levels of management and to all organizations and individuals involved with program implementation. The applicable Policies of the Operational Quality Assurance Program are mandatory for safety-related activities and functions as described in this Manual.

The Operational Quality Assurance Program applies to all activities, including the use of expendable and consumable materials, affecting the safety-related functions of those structures, systems and components which prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The program is designed to comply with the requirements of Appendix B to 10CFR50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants" and with the Regulatory Position in applicable NRC Regulatory Guides and ANSI Standards as listed in Appendix A to this Manual.

A listing of structures/systems/components designated safety-related is included in the UFSAR for the applicable nuclear generating station. A Q-list which contains as a minimum those structures/systems/components designated as safety-related in the UFSAR plus those selected nonsafety-related structures/systems/components to which the Quality Assurance Program applies is issued and maintained current.

Nuclear Plant Engineering is responsible for the development and maintenance of this Q-List in accordance with written procedures which delineate the contents of the Q-List. The procedures will assure that structures/systems/components listed in the UFSAR are contained in the Q-list. The Q-List will be procedurally controlled. The positions authorized to approve changes to the Q-List are designated in Appendix B of this Manual.

The applicable requirements of the program are also imposed upon contractors, suppliers and consultants.

Development, control, and use of computer programs for design control activities as described in Policy 3 for safety-related structures, systems and components will be conducted in accordance with the Operational Quality Assurance Program.

2.5.1 Operational Quality Assurance Manual

The Operational Quality Assurance Manual consists of quality assurance policies, goals, and objectives and has been developed in accordance with applicable regulations, codes, and standards. It describes the Operational Quality Assurance Program and delineates the responsibilities and requirements imposed by the program for the performance of safety-related activities.

2.5.1 (Continued):

The Director, Quality is responsible for maintaining the Manual and controlling its distribution, including revisions thereto, in accordance with approved Quality Assurance Procedures.

Revisions to the Manual will be processed per 10CFR50.54(a).

2.5.2 Implementing Policies, Directives, Procedures and Instructions

The Operational Quality Assurance Program is implemented through the use of written, approved policies, directives, procedures and instructions generated by the organizations responsible for the performance of the specific functions as outlined in Appendix B of this Manual.

The Quality Assurance Procedure Manual contains the implementing procedures/instructions for the quality functions performed by Quality Programs. Quality Assurance Procedures/Instructions provide measures to assure that quality-related activities are performed in a controlled manner and are documented to provide objective evidence of compliance with program requirements. The Director, Quality is responsible for approving Quality Assurance Procedures prior to implementation. The Manager, Quality Services and the Manager, Quality Systems are responsible for approving Quality Assurance Instructions prior to implementation.

Quality-related functions performed by other organizations are controlled and documented in accordance with procedures prepared, approved and controlled by the organization performing the function. These procedures assure that the functions are accomplished in a controlled manner, with specified equipment, under suitable environmental conditions, and that prerequisites have been satisfied prior to inspection or testing.

Appendix C to this Manual provides a matrix of Quality Assurance Procedures cross-referenced to the criteria of Appendix B to 10CFR50 which they implement.

2.5.3 Indoctrination and Training

Indoctrination and training programs are established for both onsite and offsite personnel performing quality-affecting activities by the organizations responsible for the activities. These programs are implemented by appropriate training plans and procedures which assure that:

- 2.5.3.1 Personnel responsible for performing quality-affecting activities are instructed as to the purpose, scope and implementation of manuals, procedures and instructions;

2.5.3 (Continued):

- 2.5.3.2 Personnel performing quality-affecting activities are trained and qualified in the principles and techniques of the activity being performed;
- 2.5.3.3 Proficiency of personnel performing quality-affecting activities is maintained by retraining, reexamining or recertifying;
- 2.5.3.4 The scope, method and objective of the training are documented;
- 2.5.3.5 Records of training sessions are prepared and maintained, including identification of the content, the attendees and the date the training was conducted.

2.5.4 This section deleted in Revision 5.

2.5.5 Resolution of Disputes

Disputes arising between licensee organizations on any quality assurance matter which cannot be resolved by management of the involved organizations will be referred to the Vice President, Engineering; the Vice President, Operations GGNS; the Senior Vice President, Planning & Assurance; the Vice President, Administrative Services & Regulatory Affairs; the Vice President, Legal and External Affairs for resolution.

| 11

2.5.6 Quality Responsibilities

Quality responsibilities for the implementation of major activities addressed in this Manual are designated in the individual policies of this Manual.

2.5.7 This section deleted in Revision 11.

| 11

2.5.8 Definitions

The terms and phrases given in the "Definition" portions of the ANSI Standards endorsed by this Program in Appendix A shall apply as well as those given in pertinent sections of the applicable portions of Title 10, Code of Federal Regulations. As used throughout this Operational Quality Assurance Program and its implementing procedures, the following words shall be construed to have the special definitions given:

- 2.5.8.1 Shall - A requirement considered enforceable by the appropriate regulatory body.

2.5.8 (Continued):

- 2.5.8.2 Should - A recommendation, but not an enforceable requirement. Management expects each employee using plant directives to carry out any "should" statement unless circumstances prevent or necessitate a deviation.
- 2.5.8.3 May - An option, neither a recommendation or a requirement.
- 2.5.8.4 Must - A requirement normally established by licensee management or may be used to meet regulatory intent.
- 2.5.8.5 Additional items are defined in Appendix A (see under Regulatory Guide 1.74), individual Quality Assurance Procedures and other quality documents.
- 2.5.8.6 Any words which have not been defined in 1 through 5 above or item 7 below shall be as defined in a contemporary collegiate dictionary by a well known publisher or authority.
- 2.5.8.7 Will - Is defined the same as Shall.

2.5.9 Quality Assurance Position Statements

Quality Assurance Position Statements are issued when considered necessary by the Director, Quality, for use in interpretation of certain commitments in the Operational Quality Assurance Manual. These statements are not a part of the NRC accepted Operational Quality Assurance Manual, and are being included in the manual binder only for the convenience of the users.

11

2.5.10 Resolution of Differences

Every attempt has been made to include the pertinent requirements from external documents, included in this Program by the commitments in Appendix A, within these Policies; no known conflicts exist between those commitments and these Policies. Differences arising during future reviews or implementation of the Program, must be brought to the attention of the Director, Quality who initiates changes to the commitments or the Policies as necessary to resolve the differences. The provisions delineated in these Policies shall take precedence over differing requirements given elsewhere until the Director, Quality has evaluated the issue and determined which requirement(s) must be modified.

11

3.0 DESIGN CONTROL

3.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control design activities affecting safety-related structures, systems and components for the Grand Gulf Nuclear Station.

3.2 SCOPE

This Policy delineates responsibilities and defines requirements for the development and implementation of design control measures to assure that design activities are carried out in a planned, controlled and orderly manner.

3.3 APPLICABILITY

The requirements of this Policy apply to all organizations performing design functions on safety-related structures, systems or components during the operational phase of nuclear power plant activities.

3.4 RESPONSIBILITY

3.4.1 Responsibility and authority for the control of design activities related to modifications or changes to plant safety-related structures, systems or components (including control of accident and transient analyses, but excluding nuclear fuel and nuclear core design see 3.4.5) during the operational phase are delegated to the Director, Design Engineering GGNS. The General Manager, Plant Operations authorizes the design modification or change to be implemented by the Manager, Plant Modification & Construction. The Director, Design Engineering GGNS is responsible for assuring that procedures are developed and implemented to control the design activities of Nuclear Plant Engineering in accordance with the requirements of this Policy.

3.4.2 The reviewing of proposed 10CFR50.59 changes is completed as required by the Technical Specifications. This is described in appropriate procedures. When a proposed change is requested, the Director, Design Engineering GGNS initiates the design change (except in cases related to nuclear fuel and core design) and assures submittal of the safety evaluation per 10CFR50.59, to the Plant Safety Review Committee (PSRC). The Manager, Fuel Fabrication is responsible for initiating design changes related to nuclear fuel and core design and for coordinating with Nuclear Safety and Regulatory Affairs and Nuclear Plant Engineering in the development of required 10CFR50.59 evaluation(s) and submittal of the evaluation(s) to the PSRC. The Manager, Plant Modification & Construction is responsible (except in cases related to nuclear fuel) for the coordination of scheduling and installation of Plant modifications, betterments and repairs once reviewed by the PSRC as

11

3.4.2 (Continued):

- required by Technical Specifications. The General Manager, Plant Operations is responsible for the scheduling and installation of nuclear fuel and core related design changes once reviewed by the PSRC as required by Technical Specifications. The Secretary of the Safety Review Committee (SRC) assures the review of the safety evaluation by the SRC. The Director, Nuclear Safety and Regulatory Affairs is responsible for developing a summary of the safety evaluation and submittal of the summary to the NRC, as required by 10CFR50.59. 11
- 3.4.3 Organizations supplying material, equipment or services are responsible for complying with the requirements of this Policy to the extent specified in the applicable procurement documents, and for imposing them on their contractors and suppliers, as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.
- 3.4.4 The Manager, Quality is delegated the responsibility for reviewing nuclear fuel and nuclear core (excluding accident and transient analyses) design documents for compliance with Operational Quality Assurance Program requirements and concurring with same; for monitoring the implementation of design control measures by offsite organizations; and for carrying out an audit program related to the above activities, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy. Those design documents include the type design documents originated, reviewed and approved by the Manager, Fuel Fabrication. 11
- 3.4.5 Responsibility and authority for control of design activities related to modification of or changes to nuclear fuel or nuclear core design (excluding control of accident and transient analysis activities - See 3.4.1) are delegated to the Manager, Fuel Fabrication. The Manager, Fuel Fabrication is involved in: providing design inputs; providing interface control; reviewing all "accept-as-is" or "repair" dispositions for nuclear fuel or core configuration nonconformances. In addition the Manager, Fuel Fabrication, may perform design verification of fuel related design activities. The Manager, Fuel Fabrication is responsible for assuring that procedures are developed and implemented for the above design activities in accordance with the requirements of this Policy. 11

3.4 (Continued):

- 3.4.6 Responsibility and authority for control of design activities (including accident and transient analyses, but excluding modification of or changes to nuclear fuel or nuclear core design) are delegated to the Director, Design Engineering GGNS. Generally, the Director, Design Engineering GGNS is involved in: providing design inputs, providing interface control; controlling design output; and performing design verification. The Director, Design Engineering GGNS is responsible for assuring that procedures are developed and implemented for the above design activities in accordance with the requirements of this Policy and will provide or concur with all "accept-as-is" or "repair" dispositions (including accident and transient analyses, but excluding modification of or changes to nuclear fuel or nuclear core design) for nonconformances. The Director, Design Engineering GGNS is responsible for reviewing GGNS design documents for compliance with the Operational Quality Assurance Program requirements and concurring with the same.
- 3.4.7 The Director, Quality, and the Manager, Quality have the responsibility for carrying out an audit program as described in Policy 18.0 of this manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy.

11

3.5 REQUIREMENTS

- 3.5.1 Organizations having design responsibilities shall develop procedures, consistent with the scope of their responsibilities, to provide measures for the control of their design activities.
- 3.5.2 Procedures shall be developed to assure that applicable design inputs such as design bases, regulatory requirements, codes and standards are identified and documented, and are correctly translated into design output documents such as specifications, drawings, procedures and instructions.
- 3.5.3 Procedures shall provide for the identification and documentation of appropriate quality standards to be specified in the design documents. Deviations and changes from these quality standards shall be controlled.
- 3.5.4 Procedures shall include measures for: the control of design analyses such as reactor physics, seismic, stress, thermal, hydraulic, radiation, and accident analyses; compatibility of materials; accessibility for inservice inspection, maintenance, and repair.
- 3.5.5 Provisions shall be made in the procedures for the selection of suitable materials, parts, equipment, and processes which include the use of valid industry standards and specifications.

3.5 (Continued):

- 3.5.6 Procedures shall require that designs be reviewed to assure that: design characteristics can be controlled, inspected and tested, as appropriate; and, inspection and test criteria are identified. Such reviews shall be documented.
- 3.5.7 Materials, parts and equipment which are standard, commercial (off-the-shelf), or which have been previously approved for a different application shall be reviewed for suitability prior to selection. Such reviews shall be documented.
- 3.5.8 Procedures shall provide for the control of design interfaces for managing the flow of design information between organizations. Systematic methods shall be established for communicating needed design information across the interfaces, including changes to the design information as the work progresses.
- 3.5.9 Procedures shall include requirements to verify that the design is adequate and that it meets the specified design inputs. The extent of the design verification required shall be a function of the importance to safety of the item, the complexity of the design, the degree of standardization, the state-of-the-art and the similarity with previously proven designs. In each case however, standardized or previously proven designs shall be reviewed for applicability prior to use.
- 3.5.10 Acceptable verification methods shall include, but not be limited to, design reviews, alternate calculations, or qualification testing. If a test program is used to verify the adequacy of a design, qualification testing of a prototype unit under the most adverse design conditions which are appropriate, shall be used.
- 3.5.11 Individuals or groups responsible for design reviews or other verification activities shall be identified in the procedures and their authority and responsibility shall be defined and controlled. Design verification shall be performed by any competent individuals or groups other than those who performed the original design but who may be from the same organization. This verification may be performed by the originator's supervisor provided the supervisor is the only technically qualified individual available and the appropriate clarification provisions listed in Appendix A to this Manual are met.
- 3.5.12 Design and specification changes, including those originating onsite, shall be subject to the same degree of control as the original design and approved by the original design organization unless another qualified, responsible organization is specifically designated.

3.5 (Continued):

- 3.5.13 Errors and deficiencies in the design process, including computer programs, that could adversely affect safety-related structures, systems or components shall be documented, and corrective action taken to preclude repetition.
- 3.5.14 Proposed modifications or changes which involve an unreviewed safety question or a change to the technical specifications shall be handled in accordance with procedures which address the requirements of 10CFR50.59.
- 3.5.15 Design records shall be maintained by the General Manager, Plant Operations in accordance with Policy 17.0 of this Manual.
- 3.5.16 This Section Deleted in Revision 4.
- 3.5.17 Plant Procedures are provided to assure that responsible plant personnel are made aware of design changes/modifications which may directly affect the performance of their duties.
- 3.5.18 During operational phase activities of a unit and while the A-E/Constructor or his suppliers are performing design or construction activities for that unit, another unit, or for shared facilities at GGNS, the licensee may choose to purchase similar services (i.e., design or construction) for the operating unit(s). If such services are purchased:
 - 3.5.18.1 They shall be procured in accordance with the requirements of Policies 4.0 and 7.0 and ANSI N45.2.13 (as modified and included in Appendix A of the OQAM);
 - 3.5.18.2 They shall be in accordance with the Quality Assurance program (A-E/Constructor's or his suppliers') in effect for similar activities on other or the same unit(s) or for shared facilities; and
 - 3.5.18.3 The A-E/Constructor's Quality Assurance Program shall be reviewed by the licensee's Supplier Quality Assurance to assure that any additional requirements which are considered necessary to assure quality have been included.

4.0 PROCUREMENT DOCUMENT CONTROL

4.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control procurement documents for safety-related material, equipment and services for the Grand Gulf Nuclear Station.

4.2 SCOPE

This Policy delineates responsibilities and defines requirements for Procurement document preparation, review, approval and change control in order to assure that purchased safety-related items and services will conform to established, specified requirements.

4.3 APPLICABILITY

The requirements of this Policy apply to all procurement documents for safety-related material, equipment and services purchased by or for the licensee during the operational phase of nuclear power plant activities.

4.4 RESPONSIBILITY

- 4.4.1 All organizations participating in the preparation of procurement documents for safety-related items and services during the operational phase are responsible for developing their own procedures or using generic procedures. In either case procurement document control procedures which address the requirements of this Policy, applicable to their scope of activities, shall be implemented.
- 4.4.2 The General Manager, Plant Operations is responsible for onsite procurement document control. He is responsible for assuring procurement activities performed by the Plant Staff are procedurally controlled in accordance with the requirements of this Policy. This includes preparation, review, approval and issue of procurement documents.
- 4.4.3 The Manager, Quality Services is responsible for performing quality reviews of procurement documents, prior to issuance, to verify conformance to the requirements of this Policy. The Manager, Quality Services is responsible for reviewing procedures for procurement document control to assure that they address the applicable requirements of this Policy.
- 4.4.4 The Director, Materials, Purchasing and Contracts is delegated the responsibility for assuring that general office procurement activities affecting GGNS are procedurally controlled in accordance with the requirements of this Policy. This includes preparation, review, approval and issuance of procurement documents.

4.4 (Continued):

- 4.4.5 Organizations supplying material, equipment or services are responsible for complying with the applicable requirements of this Policy, as specified in the appropriate procurement documents and for imposing them on their contractors and suppliers, as applicable. They are also responsible for verifying, through source verification activities, that the requirements are being adequately implemented.
- 4.4.6 The Director, Quality is responsible for assuring implementation of procurement document control measures and for quality review of procurement documents and procedures. The Director, Quality and the Manager, Quality are also responsible for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy. 11
- 4.4.7 This section deleted in Revision 10.
- 4.4.8 The Director, Design Engineering GGNS is responsible for assuring procurement activities performed by the Nuclear Plant Engineering Staff are procedurally controlled in accordance with the requirements of this Policy. This includes preparation, review, approval, and issue of procurement documents.
- 4.4.9 This section deleted in Revision 11. 11
- 4.4.10 The Manager, Plant Modification & Construction is responsible for assuring procurement activities to support the implementation of design changes and plant modifications are procedurally controlled in accordance with the requirements of this Policy. This includes preparation, review, approval and issue of procurement documents.
- 4.4.11 The Manager, Quality is responsible for assuring procurement activities performed by Supplier Quality Assurance and Services Quality Assurance staff are procedurally controlled in accordance with the requirements of this Policy. This includes preparation, review, approval, and issue of procurement documents. 11

4.5 REQUIREMENTS

- 4.5.1 Procedures shall be established by the responsible organizations to clearly delineate the sequence of actions to be accomplished to control the preparation, review, approval and issuance of procurement documents for safety-related items and services.

4.5 (Continued):

- 4.5.2 The procedures shall assure that procurement documents issued at all levels of procurement include provisions for the following, as applicable:
- 4.5.2.1 A statement of the scope of work to be performed by the contractor or supplier;
 - 4.5.2.2 Identification of the design basis technical requirements by reference to specific drawings, specifications, codes, regulations, industrial standards or other documentation, including revisions thereto, that describe the items or services to be furnished;
 - 4.5.2.3 Identification of test, inspection and acceptance requirements, and any special instructions and requirements for such activities as design, fabrication, identification, cleaning, erecting, packaging, handling, shipping and extended storage;
 - 4.5.2.4 Identification of the quality assurance program requirements which must be complied with by the contractor or supplier;
 - 4.5.2.5 Stipulation that the provisions of 10CFR21 apply;
 - 4.5.2.6 Identification of the documentation, such as drawings, specifications, procedures, fabrication and inspections plans, inspection and test records, personnel and procedure qualifications, and chemical and physical test results to be prepared and maintained by the supplier or contractor and requirements for submittal to the licensee for review and approval;
 - 4.5.2.7 Identification of those records to be retained, controlled and maintained by the supplier or contractor and those to be delivered to licensee prior to use or installation of the procured item;
 - 4.5.2.8 The licensee's right of access to the supplier's facilities and records for source quality verification, inspection and audits, as deemed necessary;
 - 4.5.2.9 Extension of applicable requirements to lower tier subcontractors and suppliers, including the licensee's right of access to facilities and records;

4.5.2 (Continued):

- 4.5.2.10 Subject to the clarification of ANSI N45.2.13, Section 8.2, given in Appendix A of this program, reporting and approving the "Accept-as-is" or "Repair" dispositions of nonconformances;
- 4.5.2.11 The licensee's right to hold shipment if procurement document requirements, including those for documentation, have not been fulfilled.
- 4.5.3 The procedures shall assure that procurement documents are subjected to technical and quality review by qualified personnel and are approved by designated individuals prior to issuance. The review and approval shall be documented and available for verification.
- 4.5.4 Review and concurrence with the adequacy of quality requirements shall include verification that the requirements are correctly stated, inspectable and controllable; that there are adequate acceptance and rejection criteria; and that the procurement documents have been prepared, reviewed and approved in accordance with the requirements of this Policy.
- 4.5.5 Changes or revisions to procurement documents shall be subjected to an equivalent review and approval as the original documents, and such review and approval shall be documented. Exceptions to this include changes in quantity, estimated price, cost items, taxes, format or editorial changes that do not affect the quality of the item or service.
- 4.5.6 Procurement documents for spare or replacement parts for safety-related structures or systems shall be subject to controls at least equivalent to those required for purchase of original equipment, or those specified by a properly reviewed and approved revision to the original requirements.

5.0 INSTRUCTIONS, PROCEDURES AND DRAWINGS

5.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to assure that all activities affecting the quality or safety of the Grand Gulf Nuclear Station are prescribed and accomplished in accordance with documented instructions, procedures, drawings or other documents appropriate to the circumstances.

5.2 SCOPE

This Policy delineates responsibilities and defines requirements for the development and implementation of measures designed to assure that safety-related activities are prescribed and accomplished in accordance with documented instructions, procedures or drawings.

5.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing activities which affect the quality of safety-related items during the operational phase of nuclear power plant activities.

5.4 RESPONSIBILITY

5.4.1 All organizations performing activities during the operational phase which affect the quality of safety-related structures, systems and components are responsible for performing these activities in accordance with directives, documented instructions, procedures or drawings. It is the responsibility of the managers of these organizations to assure the development, review, approval and control of directives, instructions, procedures and drawings necessary to control their safety-related activities in accordance with the requirements of this Manual.

It is the responsibility of the Vice President, Engineering; the Vice President, Operations GGNS, the Vice President, Operations Support; Senior Vice President, Planning & Assurance; and, the Vice President, Administrative Services and Regulatory Affairs to ensure that those instructions, policies, procedures and drawings that cross internal organizational lines integrate and function in accordance with the above.

5.4.2 This section deleted in Revision 3.

5.4.3 During the operational phase, the General Manager, Plant Operations is responsible for assuring that adequate inspection plans; test calibration, special process, maintenance, test and repair procedures; drawings, specifications and other safety-related documents and revisions thereto are used. During the implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for assuring that inspection plans; modification

5.4.3 (Continued):

procedures; drawings, specifications and other safety-related documents and appropriate revisions thereto are used.

11

The Manager, Quality Services is responsible for performing the quality review of procedures/instructions, and determining that the necessary Quality Assurance requirements are included. He is responsible for determining the need for inspection requirements in work documents. Documents which contain administrative controls which specify quality assurance requirements will also be reviewed by the Manager, Quality Services. Lower tier documents (section procedures/instructions) may be reviewed by individuals (other than the preparer) of the organization preparing the documents if such individuals have been indoctrinated in the Operational Quality Assurance Program. The Director, Quality is responsible for indoctrination and certification of these individuals.

- 5.4.4 The Director, Quality and the Manager, Quality are responsible for reviewing and/or approving instructions, procedures or drawings as indicated in Appendix B of this Manual and for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy.

11

5.5 REQUIREMENTS

- 5.5.1 Written instructions, procedures, drawings, or other documents appropriate to the circumstances shall be used to provide measures for complying with the requirements of the Operational Quality Assurance Program.
- 5.5.2 Directions commensurate with the nature of the activity shall be prescribed in instructions, procedures and/or drawings for the performance of activities affecting quality. The activities shall then be performed in accordance with the instructions, procedures and/or drawings.
- 5.5.3 Instructions, procedures or drawings shall include quantitative and/or qualitative acceptance criteria for verifying that the activities have been satisfactorily accomplished.
- 5.5.4 The responsible organizations shall establish procedures which define responsibilities and clearly delineate the sequence of actions to be accomplished in the preparation, review, approval and control of instructions, procedures, or drawings, and changes thereto.

5.5 (Continued):

- 5.5.5 Safety-related administrative procedures must reference documents used in their preparation.
- 5.5.6 When the NRC accepts changes to a policy or an appendix which result in more restrictive requirements, affected implementing Procedures must be issued or revised within 120 days. If procedures cannot be revised or issued within 120 days, the manager of the affected organization(s) must approve a schedule detailing when the required changes will be accomplished. If the approved changes are less restrictive, the more restrictive requirements must be complied with until the old procedures are revised or new procedures are issued. When changes to procedures (more restrictive) are required by changes to NRC regulations or by Bulletins or Orders, the required procedures shall be changed within 120 days or as stipulated in the licensee's response to the Bulletin or Order or as set forth in the Regulation. The more restrictive time frame shall be met.

6.0 DOCUMENT CONTROL

6.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control safety-related documents for the Grand Gulf Nuclear Station.

6.2 SCOPE

This Policy delineates responsibilities and defines requirements for the review, approval, issuance and control of documents and changes or revisions thereto, which prescribe all activities affecting quality or safety.

6.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing functions which affect safety-related structures, systems or components during the operational phase of nuclear power plant activities.

6.4 RESPONSIBILITY

6.4.1 Responsibility and authority for the control of safety-related documents during the operational phase are delegated to the individuals/organizations specified in Appendix B of this Manual. They are responsible for developing and implementing procedures to control the review, approval and issue of documents in accordance with the requirements of this Policy.

6.4.2 Organizations supplying material, equipment or services are responsible for complying with the applicable requirements of this Policy as specified in the appropriate procurement documents, and for imposing them on their contractors and suppliers, as applicable. They are also responsible for assuring, through surveillance or audits, that the requirements are being adequately implemented.

6.4.3 This section deleted in Revision 4.

6.4.4 The Director, Quality and the Manager, Quality, are responsible for monitoring document control activities and for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify compliance with Operational Quality Assurance Program requirements, including the requirements of this Policy. 11

6.5 REQUIREMENTS

6.5.1 Procedures shall be established and implemented by the responsible organizations to provide for the control of documents, including changes thereto, which prescribe all activities affecting quality or safety. These procedures are identified in Appendix B to this Manual.

6.5 (Continued):

- 6.5.2 The procedures shall identify the documents to be controlled. As a minimum, they shall include:

Design Specifications

Design, Manufacturing, Construction and Installation Drawings

Procurement Documents

Quality Assurance Manuals, Procedures and Instructions

Operating Procedures

Operating and Special Orders

Maintenance and Modification Procedures

Manufacturing, Inspection and Test Procedures

Equipment and Material Control Procedures

Refueling Procedures

Updated Final Safety Analysis Report

Design Change Requests/Packages

Design Change Notices

Quality Deficiency Documents

Q-List

- 6.5.3 The procedures shall specify the individuals or organizations responsible for the preparation, review, approval, issuance and control of the documents, and revisions thereto.

- 6.5.4 Review of documents for adequacy shall be performed by knowledgeable personnel other than the originator. Reviewers shall have access to pertinent background information and shall have adequate understanding of requirements and intent of the document.

- 6.5.5 Documents shall be approved for issue by authorized personnel prior to release and shall be distributed in accordance with current, documented distribution lists.

- 6.5.6 Master lists or their equivalents shall be established and maintained to identify the current status of instructions, procedures, specifications, drawings and procurement documents. The list shall be available to responsible personnel to preclude the use of superseded documents.

6.5 (Continued):

- 6.5.7 Documents required to perform a specific activity shall be available at the location where the activity is to be performed prior to commencement of the activity. Cancelled, deactivated or superseded documents shall be controlled to prevent their inadvertent use.
- 6.5.8 Unless delegated to other appropriately qualified organizations, changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval.
- 6.5.8.1 Changes shall be included in the documents (i.e., procedures or instructions) prior to implementation of the change, except in those cases where adequate procedural controls allow implementation of changes prior to revision of the original document. These changes, if considered permanent, shall be incorporated into the original document in a timely manner as defined by Quality Programs.
- 6.5.8.2 This section deleted in Revision 11.
- 6.5.8.3 This section deleted in Revision 11.
- 6.5.8.4 This section deleted in Revision 11.
- 6.5.9 This section deleted in Revision 11.
- 6.5.10 Subject to the clarification of ANSI N18.7-1976/ANS 3.2, Section 5.2.15 given in Appendix A of this program, plant procedures (as defined in Technical Specification 6.8.1) shall be reviewed by an individual knowledgeable in the area affected upon identification of new or revised source material potentially affecting the intent of procedures or prior to use if the procedure/instruction is not used routinely to determine if changes are necessary or desirable. A biennial audit by the Quality Programs Department will be performed to verify the effectiveness of controls used to maintain procedures current. A revision of the procedure constitutes a procedure review.
- 6.5.11 Following any modification to a plant system and prior to initiation of any activity affected by the modification, the applicable procedures shall be reviewed to determine if changes are required.
- 6.5.12 A documented review of applicable procedures shall be performed following an accident, an unexpected transient, significant operator error, or equipment malfunction which results in a reportable event to determine if changes are required to prevent recurrence.

11

6.5 (Continued):

- 6.5.13 Review and approval of documents, and changes thereto, shall be documented to the extent necessary to provide evidence of compliance with the requirements of this Policy.

7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES

7.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control the procurement of safety-related material, equipment and services for the Grand Gulf Nuclear Station.

7.2 SCOPE

This Policy delineates responsibilities and defines requirements for the control of activities performed during the procurement of safety-related items and services in order to assure that such items and services conform to the procurement documents.

7.3 APPLICABILITY

The requirements of this Policy apply to all safety-related material, equipment and services procured for the operational phase of nuclear power plant activities, and to all individuals or organizations participating in the procurement of such items or services.

7.4 RESPONSIBILITY

7.4.1 Responsibility and authority for controlling the procurement of safety-related material, equipment and services during the operational phase are delegated to; the Director, Nuclear Support; the Director, Nuclear Safety and Regulatory Affairs; the Director, Quality; the Director, Design Engineering GGNS; the General Manager, Plant Operations (for post modification, startup testing and operations); the Director, Materials, Purchasing and Contracts; the Manager, Quality; and the Director, Plant Projects & Support. It is the responsibility of these individuals to assure that the requirements of this Policy, which are applicable to their scope of activities, are implemented in accordance with written approved procedures. These activities include, as appropriate: source evaluation and selection; evaluation of objective evidence of quality furnished by the supplier; source verification; examination of items upon delivery.

11

7.4.2 Organizations supplying safety-related material, equipment and services are responsible for complying with the applicable requirements of this Policy, as stipulated in the procurement documents, and for imposing them upon their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

7.4.3 The Director, Quality is delegated the responsibility for assuring implementation of procurement activities at GGNS. He is responsible for inspection as necessary to assure compliance with the requirements of this Policy.

11

7.4 (Continued):

- 7.4.4 The Director, Quality is responsible for assuring the implementation of Operational Quality Assurance Program requirements relative to procurement activities and an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy. | 11
- 7.4.5 The Manager, Quality is responsible for assuring the implementation of Operational Quality Assurance Program requirements relative to procurement activities, including: the quality evaluation of suppliers and source verification, as described in Policy 18.0 of this manual to verify conformance with the Operational Quality Assurance Program requirements, including the requirements of this Policy. | 11

7.5 REQUIREMENTS

- 7.5.1 Measures shall be established, implemented and documented by the appropriate organizations, consistent with their scope of responsibilities, to assure that purchased material, equipment and services, whether procured directly or through contractors, conform to the procurement documents. These measures shall include provisions, as appropriate, for source evaluation and selection, objective evidence of quality furnished by the supplier, inspection, source verification, and/or examination of items upon delivery.
- 7.5.2 Procedures shall be established to provide for the selection of suppliers based on one or more of the following:
- 7.5.2.1 An evaluation of the Supplier's Quality Assurance Program/Manual/Procedures, as appropriate.
 - 7.5.2.2 Review and evaluation of historical quality performance data;
 - 7.5.2.3 Source qualification programs;
 - 7.5.2.4 Source quality surveys;
 - 7.5.2.5 Through the use of Nuclear Procurement Issues Committee (NUPIC) audits and other utility audits indicating a program meeting appropriate requirements. A copy of the qualifying audit report shall be obtained and reviewed for adequacy and applicability prior to selection. | 11
 - 7.5.2.6 Through the NRC's "Licensee Contractor and Vendor Inspection Status Report" (white book) for contractors with IE letters confirming Quality Assurance Program implementation;

7.5.2 (Continued):

7.5.2.7 Through documented information received from others (architect-engineer, NSS, supplier, other utilities, ASME, etc.) indicating a program meeting appropriate Quality Assurance Program requirements.

The procedures shall specify the organizations responsible for performing technical and quality evaluations, the methods of evaluation and the criteria for supplier acceptance.

7.5.3 Evaluation and selection of the supplier shall be performed in accordance with written procedures by qualified quality assurance and technical personnel prior to or concurrent with award of the procurement document.

Items which have been manufactured or are to be manufactured prior to this concurrence with the contractor or supplier Quality Assurance Program will be acceptable, but shall not be relied upon to fulfill any safety-related function until after the item is shown to meet procurement requirements (including Quality Assurance Program).

7.5.4 Results of supplier evaluations shall be documented and retained on file. Any deficiency identified during a supplier evaluation shall be resolved early enough in the procurement cycle to prevent the deficiency from adversely affecting the quality of the purchased product or service.

7.5.5 Procedures shall be established to provide for evaluation and verification activities such as source verifications, as necessary, to assure the quality of the item and to verify supplier conformance to procurement document requirements.

7.5.6 Inspection procedures shall specify the characteristics or processes to be witnessed, inspected or verified, and accepted. The method of verification and the extent of documentation required; and those responsible for implementing the inspection. Quality procedures shall specify the characteristics or processes witnessed, observed or verified, including the method of verification and the extent of documentation required. Audits shall be performed in accordance with procedures which implement the requirements of Policy 18.0 of this Manual.

7.5.7 The extent and frequency of evaluation and verification activities shall be a function of the relative importance, complexity and quality of the item procured and the supplier's quality performance. Source verifications may not be necessary when conformance of an item to procurement requirements can be verified by receipt inspection, review of test reports, or other means.

7.5 (Continued):

- 7.5.8 Receipt inspection of supplier-furnished items shall be procedurally controlled to assure: that the items are properly identified and correspond with the identification on the receiving documentation; that the items and acceptance records are inspected and judged acceptable in accordance with predetermined instructions prior to installation or use; that inspection records or certificates of conformance are available at GGNS prior to installation or use of the item; and, that items accepted and released are identified as to their inspection status prior to storage or use.

| 11

Controls in Plant and Quality Assurance Procedures will cover the conditional release process, and will assure that the applicable procedural and administrative aspects of this Policy (7.5.8) and Policies 8.5.8, 14.5.5 and 15.5.5 of the Operational Quality Assurance Program are fulfilled.

- 7.5.9 Records required to be furnished by the supplier shall be specified in the procurement documents, as stipulated in Policy 4.0 of this Manual. These records shall be reviewed and accepted by personnel specifically designated to perform this activity. These personnel will be designated in accordance with applicable procedures. Other licensee organizations may be used when their areas of expertise provide an adequate basis for such a review. (e.g., Nuclear Fuels could review records from nuclear fuel suppliers.)
- 7.5.10 The records shall include, as a minimum, documentation that identifies the purchased item and the specific procurement requirements (e.g., codes, standards, specifications) met; and documentation which identifies procurement requirements which have not been met. Subject to the clarification of ANSI N45.2.13, Section 8.2, given in Appendix A of this Manual, such documentation shall include a description of those nonconformances dispositioned "accept-as-is" or "repair".
- 7.5.11 Where supplier certificates of conformance are used to identify the requirements met by the item, the certificates of conformance shall be periodically evaluated by audits, independent inspections or tests to assure that they are valid.
- 7.5.12 Spare or replacement parts for safety-related systems or components shall be procured, fabricated and controlled in accordance with present Quality Assurance programmatic controls and technical requirements at least equivalent to those used for the original item, or those specified by a properly reviewed and approved revision to the original requirements.

7.5 (Continued):

- 7.5.13 When a supplier is removed from the Qualified Suppliers List, procedures shall assure that any outstanding purchase orders for that supplier are reviewed, and appropriate action taken to assure that materials subsequently received from that supplier are handled and dispositioned as nonconformances.
- 7.5.14 This section deleted in Revision 6.

8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS AND COMPONENTS

8.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide for the identification and control of safety-related material, parts and components for the Grand Gulf Nuclear Station.

8.2 SCOPE

This Policy delineates responsibilities and defines requirements for the identification and control of safety-related items in order to assure that only correct and accepted items are used or installed.

8.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations participating in the procurement, fabrication, receipt, storage, installation, operation, modification or repair of safety-related items during the operational phase of nuclear power plant activities.

8.4 RESPONSIBILITY

- 8.4.1 Responsibility and authority for the identification, control and testing of materials, parts and components during the operational phase are delegated to the General Manager, Plant Operations except, during implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for this activity. They are responsible for assuring that procedures are established to address the applicable requirements of this Policy, and that identification and control of safety-related items is maintained in accordance with the procedures from procurement of the item through fabrication, storage, installation and use.
- 8.4.2 Organizations supplying safety-related material, equipment and services are responsible for complying with the applicable requirements of this Policy, as stipulated in the procurement documents, and for imposing them on their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.
- 8.4.3 The Manager, Quality Services is delegated the responsibility for assuring implementation of identification and control requirements for items at GGNS by receipt inspection and other inspections. The Manager, Quality Services is responsible for reviewing procedures and work documents to the extent necessary to verify conformance to the applicable requirements of this Policy.

| 11

8.4 (Continued):

- 8.4.4 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy.

11

8.5 REQUIREMENTS

- 8.5.1 Procedures shall be established and implemented to provide for the identification and control of safety-related materials, parts and components, including partially fabricated subassemblies, in order to assure that only correct and accepted items are used and installed.
- 8.5.2 The procedures shall be developed by the appropriate organizations to cover the various stages from procurement of the item through fabrication, receipt, storage, installation, use, modification or repair.
- 8.5.3 The procedures shall provide assurance that a unique identification of items is maintained, such as by part number, serial number, heat number, drawing identification number or other appropriate means.
- 8.5.4 The procedures shall assure that identification is maintained either on the item or on records traceable to the item. Physical identification, such as by marking or tagging, shall be used to the maximum extent practical.
- 8.5.5 When specified by codes, standards, procurement documents, or other requirements; identification shall be such that items are traceable to appropriate documentation (e.g., specifications, drawings, purchase orders, manufacturing and inspection documents, nonconformance reports, physical or chemical mill test reports).
- 8.5.6 Where identification marking is employed, the marking shall be clear, unambiguous and indelible, and shall be applied in such a manner as not to affect the fit, function or quality of the item.
- 8.5.7 Markings shall be transferred to each part of an item, if subdivided, and shall not be obliterated or hidden by surface treatment or coatings unless other means of identification are substituted.

8.5 (Continued):

- 8.5.8 Procedures shall provide for the verification and documentation of correct identification of items prior to release for fabrication, assembling, shipping, storage or installation. Items may be conditionally released under adequate procedural controls. These controls shall assure that the system, subsystem, or component that receives such items is considered inoperable, no reliance shall be placed on such system, subsystem, or component for fulfilling their intended safety function. The Manager, Quality Services is responsible for reviewing and concurring with conditional releases. Applicable procedural and administrative aspects of this Policy (8.5.8) and Policies 7.5.8, 14.5.5 and 15.5.5 of the Operational Quality Assurance Program shall be fulfilled.

9.0 CONTROL OF SPECIAL PROCESSES

9.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide for the control of safety-related special processes for the Grand Gulf Nuclear Station.

9.2 SCOPE

This Policy delineates responsibilities and defines requirements for the control of special processes including, but not limited to, cleaning, heat treating, welding, nondestructive examination or unique fabricating or testing processes which require interim in-process controls.

9.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing special processes during the operational phase of nuclear power plant activities under this Operational Quality Assurance Program.

9.4 RESPONSIBILITY

9.4.1 Responsibility and authority for the control of special processes, except nondestructive examination, at GGNS during the operational phase are delegated to the General Manager, Plant Operations. During the implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for ensuring that special processes are controlled in accordance with procedures developed by the General Manager, Plant Operations. Responsibility and authority for the control of nondestructive examination are delegated to the Director, Quality. They are responsible for assuring that special processes are performed in accordance with procedures and instructions which implement the requirements of this Policy. They are also responsible for assuring that contractors who are delegated responsibilities for the onsite performance of special processes, impose the applicable requirements of this Policy on their internal operations and on their contractors and suppliers. | 11

9.4.2 Offsite organizations responsible for the performance of special processes shall be subject to the applicable requirements of this Policy as specified in the appropriate procurement documents. Individuals or organizations responsible for the preparation of procurement documents shall assure that the applicable requirements of this Policy are included, as stipulated in Policy 4.0 of this Manual. | 11

9.4 (Continued):

- 9.4.3 The Manager, Quality Services is responsible for reviewing Plant Administrative Procedures and Nuclear Plant Engineering Procedures, controlling special processes, and for reviewing work documents and inspection of special process activities, including nondestructive examinations, to the extent necessary to verify conformance to the requirements of this Policy.
- 9.4.4 The Director, Quality and the Manager, Quality have the responsibility for monitoring the special process control measures of offsite organizations, and for carrying out an audit program, as described in Policy 18.0 of this Manual; to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy. | 11
- 9.4.5 The Director, Design Engineering (GNS) has the responsibility for assuring that special process standards and specifications are established to address the applicable requirements of this Policy. He is also responsible for reviewing and approving all contractor special process standards prior to use at GNS. | 11

9.5 REQUIREMENTS

- 9.5.1 Procedures shall be developed and implemented by the responsible organizations to assure the control of special processes including, but not limited to, chemical cleaning, heat treating, welding and nondestructive examination.
- 9.5.2 Special processes shall be accomplished under controlled conditions in accordance with applicable codes, standards, specifications or other special requirements.
- 9.5.3 Special processes shall be performed by personnel qualified in accordance with applicable codes, standards, specifications, or other special requirements.
- 9.5.4 Equipment and procedures used in the performance of special processes shall be qualified in accordance with applicable codes, standards, specifications or other special requirements.
- 9.5.5 Qualification records of personnel, equipment and procedures associated with special processes shall be established, maintained and kept current.
- 9.5.6 For special processes not covered by existing codes or standards, or where item quality requirements exceed the requirements of existing codes or standards, the necessary qualifications of personnel, procedures and equipment shall be defined and documented.

10.0 INSPECTION

10.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide for the inspection of activities affecting the safety of the Grand Gulf Nuclear Station.

10.2 SCOPE

This Policy delineates responsibilities and defines requirements for the development and implementation of a program for the inspection of activities affecting safety in order to verify conformance to the documented instructions, procedures and drawings for accomplishing the activity.

10.3 APPLICABILITY

The requirements of this Policy apply to all inspections performed on safety-related structures, systems or components during the operational phase of nuclear power plant activities.

10.4 RESPONSIBILITY

10.4.1 Overall responsibility and authority for establishing and implementing an inspection program at GGNS during the operational phase are delegated to the Director, Quality and the General Manager, Plant Operations. During the implementation of design changes and plant modifications, the Manager, Plant Modification & Construction, in conjunction with the Director, Quality is responsible for these activities. The Director, Quality is responsible for assuring that procedures/ instructions developed for the performance of work operations include appropriate inspection requirements and for assuring that inspections and examinations are performed and documented where necessary to assure quality. The General Manager, Plant Operations and the Manager, Plant Modification & Construction (for implementation of design changes and plant modifications) are responsible for assuring that measurements and tests of materials, products or activities are performed and documented for each work operation where necessary to assure quality.

10.4.2 The Manager, Quality Services is delegated the responsibility for assuring that the onsite inspection program (including receipt inspection) is carried out in accordance with the requirements of this Policy. The Manager, Quality Services is responsible for reviewing Plant Administrative Procedures which control work instructions, modification and repair instructions;

10.4.2 (Continued):

and other documents to assure that they contain the appropriate inspection requirements. The Manager, Quality Services is responsible for developing procedures for the performance of all quality inspections. The Manager, Quality Services is responsible for implementing inspection procedures. The coordination of activities concerning the training and certification of all quality inspectors shall be accomplished by the Director, Quality Level III inspectors are appointed. All safety-related work authorizations will be reviewed, as defined by the appropriate implementing Administrative Procedures, by the Manager, Quality Services for determination of any quality inspection requirements. Procedures or work authorizing documents which control repetitive tasks are reviewed initially and when revised for inclusion of inspection requirements. The Manager, Quality is delegated the responsibility for assuring that the source inspection program is carried out in accordance with the requirements of this policy.

11

10.4.3 The licensee may delegate the responsibility for implementing certain portions of the inspection program to other organizations. However, the licensee retains the ultimate responsibility for assuring that all aspects of the inspection program are carried out. At GGNS, the Manager, Quality Services is responsible for assuring that inspection activities assigned to outside organizations are accomplished in accordance with the requirements of this Policy.

11

10.4.4 Organizations supplying safety-related material, equipment and services are responsible for complying with the applicable requirements of this Policy, as stipulated in the procurement documents, and for imposing them upon their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

10.4.5 The Director, Quality is responsible for qualification of inspectors. The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy.

11

10.5 REQUIREMENTS

- 10.5.1 Inspection requirements shall be included in applicable specifications, drawings, procedures, instructions or other documents which prescribe and control safety-related activities.
- 10.5.2 These inspection requirements shall be translated into a documented inspection program, to be implemented by the responsible organizations in accordance with written Procedures, which verifies that the activities are accomplished in accordance with the specifications, drawings, procedures or instructions.
- 10.5.3 Inspection procedures, instructions or checklists shall include provisions, as required, for the following:
 - 10.5.3.1 Identification of characteristics and activities to be inspected;
 - 10.5.3.2 Identification of the individuals or organizations responsible for performing the inspection activities;
 - 10.5.3.3 Identification of acceptance and rejection criteria;
 - 10.5.3.4 A description of the method of inspection;
 - 10.5.3.5 Recording evidence of the completion and verification of a manufacturing, inspection or test operation;
 - 10.5.3.6 Recording the identity of the inspector or data recorder and the results of the inspection operation; and,
 - 10.5.3.7 Specifying the necessary measuring and test equipment, including the accuracy requirements. Accuracy may be specified by requiring a specific model or type of instrument.
- 10.5.4 The applicable drawings and specifications shall be available for use with the inspection procedures, instructions or checklists when an inspection operation is being carried out.
- 10.5.5 Inspections shall be performed by qualified personnel who are independent of those individuals who performed the activity being inspected. Inspection or operating activities (work functions associated with normal operation of the Plant, routine maintenance, and certain technical services routinely assigned to the onsite operating organization) may be conducted by second-line

10.5.5 (Continued):

supervisory personnel or by other qualified personnel not assigned first-line supervisory responsibility for conduct of the work.

When inspections of operating activities are performed by individuals other than those who performed or directly supervised the work, but are within the same group, the following controls shall be met:

- 10.5.5.1 The quality of the work can be demonstrated through a functional test when the activity involves breaching of pressure retaining items;
- 10.5.5.2 The qualification criteria for inspection personnel are reviewed and found acceptable by Quality Programs prior to initiating the inspection.
- 10.5.6 Personnel performing inspections which require specialized qualifications or skills shall be qualified in accordance with applicable codes, standards or licensing requirements, and their qualifications and certifications shall be documented and kept current.
- 10.5.7 If mandatory inspection hold points are required, the specific hold points shall be specified in the appropriate drawings, specifications, procedures or instructions. The inspection program shall provide assurance that work does not progress beyond the hold point until released by the designated authority, and that required notification and acknowledgement has been satisfied prior to work continuing.
- 10.5.8 If inspection is impossible or disadvantageous, indirect control shall be provided by monitoring processing methods, equipment, and personnel. Inspection and process monitoring shall be utilized if control is inadequate without both.
- 10.5.9 Instructions addressing maintenance, modifications, repairs or replacements shall be reviewed by qualified personnel (other than the preparer) who have the knowledge required to determine the need for inspection, identification of inspection personnel, and documenting inspection results.
- 10.5.10 Modifications, repairs and replacements shall be inspected in accordance with the original design and inspection requirements or documented engineering approved alternatives.

10.5 (Continued):

- 10.5.11 Inspection data and results shall be evaluated by designated Personnel to assure that the inspection objectives have been met and that items requiring action or follow up are identified and documented.
- 10.5.12 Records shall be kept in sufficient detail to provide adequate confirmation of the inspection program. Records shall be maintained in accordance with Policy 17.0 of this Manual.
- 10.5.13 Inspections need not be performed for each specific work activity. Procedures used for assigning inspections shall require the following to be evaluated in assignment of inspections.
 - 10.5.13.1 Complexity, magnitude or criticality of the work.
 - 10.5.13.2 Documented engineering inspection requirements.
 - 10.5.13.3 Design organization inspection requirements.
 - 10.5.13.4 Components safety impact.
- 10.5.14 Inspections shall be performed on repetitive, routine and rework items as determined by the Manager, Quality Services.

11.0 TEST CONTROL

11.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control testing of safety-related structures, systems and components for the Grand Gulf Nuclear Station.

11.2 SCOPE

This Policy delineates responsibilities and defines requirements for the establishment and implementation of a test program to assure that testing required to demonstrate that safety-related items will perform satisfactorily in service is identified, accomplished and documented.

11.3 APPLICABILITY

The requirements of this Policy apply to all testing performed on safety-related structures, systems and components during the operational phase of nuclear power plant activities and also to required preoperational testing.

11.4 RESPONSIBILITY

11.4.1 The responsibility and authority for the development and implementation of maintenance and surveillance testing programs during the operational phase are delegated to the General Manager, Plant Operations. The General Manager, Plant Operations is also responsible for the development and implementation of testing programs for design changes and plant modifications. He is responsible for assuring that the test programs are established and implemented in accordance with procedures and instructions which address the requirements of this Policy. He is also responsible for assuring that contractors who are delegated onsite testing responsibilities impose the applicable requirements of this Policy on their internal operations and on their contractors or suppliers.

11.4.2 Organizations responsible for conducting offsite testing are subject to the applicable requirements of this Policy as specified in the appropriate procurement documents. Individuals or organizations responsible for the preparation of procurement documents shall assure that the applicable requirements of this Policy are included, as stipulated in Policy 4.0 of this Manual.

11.4.3 This section deleted in Revision 3.

11

11.4 (Continued):

- 11.4.4 The Manager, Quality Services is delegated the responsibility for assuring implementation of test activities at GGNS by inspection. He is responsible for reviewing test programs and Plant Administrative Procedures which control testing to verify conformance to the requirements of this Policy.
- 11.4.5 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy.

11

11.5 REQUIREMENTS

- 11.5.1 A test program shall be established and implemented to assure that testing required to demonstrate that a safety-related structure, system or component will perform satisfactorily in service is identified and documented, and that the testing is performed in accordance with written, controlled test procedures.
- 11.5.2 The test program shall be implemented by the responsible organizations to cover all required testing, including prototype tests, preoperational tests, initial start-up tests, surveillance tests, and tests associated with plant maintenance and modifications during the operational phase.
- 11.5.3 This section deleted in Revision 3.
- 11.5.4 This section deleted in Revision 3.
- 11.5.5 Surveillance testing during the operational phase shall be performed to provide assurance that failures or substandard performance do not remain undetected and that the required reliability of safety-related systems is maintained. A surveillance testing schedule(s) shall be established reflecting the status of all planned in-plant surveillance tests and inspections. Frequency of surveillance tests may be related to the results of reliability analyses, the frequency and type of service, or age of the item, as appropriate.
- 11.5.6 Tests performed following plant modifications, repairs or replacements shall be conducted in accordance with the original design and testing requirements or engineering approved, documented alternatives. Testing shall be sufficient to confirm that the modifications or changes reasonably produce expected results and that the change does not reduce safety of operations.

11.5 (Continued):

- 11.5.7 Written procedures for performing the tests shall incorporate or reference the following, as applicable:
 - 11.5.7.1 A description of test objectives;
 - 11.5.7.2 The requirements and acceptance limits contained in applicable design and procurement documents;
 - 11.5.7.3 Instructions for performing the test;
 - 11.5.7.4 Test prerequisites (e.g., calibrated instrumentation; adequate and appropriate equipment; trained, qualified, and licensed or certified personnel; assurance of completeness of the item to be tested; suitable and controlled environmental conditions; and provisions for data collection and storage);
 - 11.5.7.5 Hold points or witness points for inspection by designated personnel;
 - 11.5.7.6 Acceptance and rejection criteria;
 - 11.5.7.7 Methods of documenting or recording test data and results.
- 11.5.8 The documented test results shall be evaluated and their acceptability determined by qualified individuals or organizations as designated in the procedures.

12.0 CONTROL OF MEASURING AND TEST EQUIPMENT

12.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide for the control of measuring and test equipment used in the performance of safety-related activities for the Grand Gulf Nuclear Station.

12.2 SCOPE

This Policy delineates responsibilities and defines requirements for the calibration, maintenance and control of measuring and test equipment used in safety-related applications in order to assure the required accuracy of such equipment.

12.3 APPLICABILITY

The requirements of this Policy apply to all tools, instruments, testing equipment and measuring and control devices used in inspections, measurements, tests or monitoring of safety-related components, systems or structures during the operational phase of nuclear power plant activities.

The requirements of this Policy do not apply to rulers, tape measurers, levels and other such devices if normal commercial practices provide sufficient accuracy.

12.4 RESPONSIBILITY

12.4.1 Responsibility and authority for the control of measuring and test equipment at GGNS during the operational phase are delegated to the General Manager, Plant Operations. During implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for ensuring that all M&TE utilized are controlled in accordance with procedures developed by the General Manager, Plant Operations. They are responsible for assuring that procedures are developed to implement the requirements of this Policy.

12.4.2 Organizations supplying materials, equipment or services are responsible for complying with the applicable requirements of this Policy, as specified in the appropriate procurement documents and for imposing them on their contractors and suppliers, as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

|11

12.4 (Continued):

- 12.4.3 The Manager, Quality Systems is delegated the responsibility for assuring by audit the control of measuring and test equipment at GGNS. The Manager, Quality Services is delegated the responsibility for assuring by inspection the control of measuring and test equipment at GGNS. The Manager, Quality Services is responsible for reviewing Plant Administrative Procedures which govern equipment control instructions to verify conformance to the requirements of this Policy. |11
- 12.4.4 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy. |11

12.5 REQUIREMENTS

- 12.5.1 Organizations performing safety-related functions which require the use of measuring and test equipment such as instruments, control devices, gages, tools, fixtures, calibration standards and nondestructive test equipment shall establish and implement procedures to control the calibration, maintenance and use of such equipment.
- 12.5.2 Procedures shall assure that measuring and test equipment used for measurements, tests or calibrations is of the proper range and type and is controlled, calibrated, adjusted and maintained at specific intervals, or prior to use, to assure necessary accuracy.
- 12.5.3 The method and interval of calibration shall be established for each device or generic grouping thereof, and shall be based on the type of equipment, stability and reliability characteristics, required accuracies and other conditions affecting calibration.
- 12.5.4 Procedures shall provide methods for the positive identification of all measuring and test equipment included under the calibration system, documentation of its calibration status; and traceability to documented calibration test data.
- 12.5.5 Installed operations measuring and test equipment requiring calibration shall be labeled, tagged or otherwise controlled in accordance with written, approved procedures to assure that approved calibration intervals are not exceeded. Portable measuring and test equipment may be similarly controlled; but shall, as a minimum, be clearly labeled to indicate the date on which the current calibration expires. Portable measuring and test equipment

12.5.5 (Continued):

that has exceeded the approved calibration interval shall not be used for measurements or tests.

12.5.6 Calibration standards shall be traceable to nationally recognized standards; or, where national standards do not exist, provisions shall be established to document the basis for calibration. In order to establish this traceability, calibrating standards should have a greater accuracy than the standard being calibrated and possess sufficient range and stability to assure that the standard being calibrated is within the required tolerance. Calibrating standards with the same accuracy as the standard being calibrated shall be allowed if it can be shown to be adequate for the requirements and the basis of acceptance is documented and evaluated by a technically knowledgeable individual and authorized by responsible management.

12.5.7 Measuring and Test Equipment (M&TE) should be calibrated against standards (for the purpose of calibration M&TE is defined as that equipment, whether permanently installed or portable, used to calibrate permanent plant devices) that have an accuracy of at least four times the required accuracy of the M&TE being calibrated. A standard of lesser accuracy shall be allowed provided that the basis of acceptance is documented, evaluated for adequacy by a technically knowledgeable individual and authorized by responsible management.

Calibration of permanent plant devices shall be against M&TE having sufficient accuracy, greater than the device being calibrated, to assure that the system containing the device is within the specified system tolerance. The basis for determining the greater than accuracy of the M&TE used shall be reproducible, either by engineering demonstration or documentation. When an accuracy is specified in the Technical Specifications or bases thereof, this accuracy may be used in lieu of one determined by engineering demonstration or documentation.

12.5.8 Measures shall be established to assure that, if a piece of measuring and test equipment is found to be out of calibration, an evaluation shall be made and documented, in accordance with Policy 15.0, to verify the validity of previous tests and the acceptability of devices tested since the time of the last calibration. A permanent plant device which is found out of calibration, but within the tolerance given in the Technical Specifications, may be adjusted. Such actions shall be documented, but they need not be evaluated or processed as specified in Policy 15.0.

12.5.9 If any calibration, testing or measuring device is consistently found to be out of calibration, it shall be repaired or replaced.

13.0 HANDLING, STORAGE AND SHIPPING

13.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to control the handling, storage and shipping of safety-related materials, components and systems for the Grand Gulf Nuclear Station.

13.2 SCOPE

This Policy delineates responsibilities and defines requirements for handling, storage and shipping, including cleaning, packaging and preservation of safety-related items in order to assure that the requisite quality of the items is maintained until they are used or incorporated into the nuclear power plant.

13.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations participating in the cleaning, handling, packaging, preservation, shipping and storage of safety-related items during the operational phase of nuclear power plant activities.

13.4 RESPONSIBILITY

13.4.1 During the operational phase at GGNS, the responsibility and authority for control of handling, storage and shipping, including cleaning and preservation, are delegated to the General Manager, Plant Operations. During the implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for these activities. They are responsible for assuring that procedures are established to address the applicable requirements of this Policy and that work and inspection activities are accomplished in accordance with the established procedures.

13.4.2 Organizations supplying safety-related material, equipment and services are responsible for complying with the applicable requirements of this Policy, as stipulated in the procurement documents, and for imposing them on their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

11

13.4 (Continued):

- 13.4.3 The Manager, Quality Services is delegated the responsibility for inspection of the control of handling and storage at GGNS including during preoperational and startup testing. The Manager, Quality Services is delegated the responsibility for warehouse-related inspection (including receipt inspection) of the control of handling, storage and shipping at GGNS including during preoperational and startup testing. The Manager, Quality Services is responsible for reviewing Plant Administrative Procedures to verify conformance to the applicable requirements of this Policy.
- 13.4.4 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy.

11

13.5 REQUIREMENTS

- 13.5.1 Procedures shall be established to control handling, storage and shipping, including cleaning, packaging and preservation of safety-related materials, components and systems. The Procedures may be developed to cover generic classifications of items which require equivalent levels of protection and control during handling, storage and shipping. Classified items shall be restricted to that level or higher for each of the particular handling, storage and shipping operations; and a change in the classification of an item shall only be made in accordance with a written, engineering approved procedure.
- 13.5.2 The procedures shall be developed by the appropriate organizations to cover the various stages from fabrication or manufacture of the items to incorporation into the plant.
- 13.5.3 The procedures shall address the applicable design and regulatory requirements; codes and standards; and manufacturer's recommendations as approved by the licensee engineering personnel for the prevention of damage, deterioration or loss prior to installation or use. Source quality verification or inspection operations necessary to verify conformance to the established criteria shall be included in procedures, and documentation of the verification activities shall be required.

13.5 (Continued):

- 13.5.4 Packaging and preservation procedures shall provide assurance of adequate protection against corrosion, contamination, physical damage or any effect which would lower the quality of the item or cause it to deteriorate during shipping, handling or storage. Special protective environments, special coverings, inert gas atmosphere, allowable moisture content, and temperature level shall be specified as required and their existence verified and documented.
- 13.5.5 Cleaning procedures shall provide assurance that necessary cleaning operations are carried out prior to packaging, storage or installation. The level of cleanliness required and verification and documentation requirements shall be specified in the procedures.
- 13.5.6 Procedures shall be provided to assure that proper marking and labeling of items and containers is accomplished to provide identification and necessary instructions during packaging, shipment and storage.
- 13.5.7 Measures for receipt inspection of items, disposition of received items and control of nonconforming items shall be addressed in procedures which implement the applicable requirements of Policies 7.0 and 15.0 of this Manual.
- 13.5.8 Detailed handling procedures shall be provided for all items that require special handling. Special handling tools and equipment shall be provided and controlled to ensure safe and adequate handling. These tools and equipment shall be maintained, inspected and tested in accordance with written procedures at established intervals to ensure their reliability and availability for use.
- 13.5.9 Storage procedures shall provide for methods of storage and the control of items in storage which will minimize the possibility of damage or deterioration during storage. Periodic inspections of storage areas shall be performed and documented to verify compliance with storage procedures. Release of items for installation shall also be procedurally controlled.
- 13.5.10 This section deleted in Revision 11.

| 11

14.0 INSPECTION, TEST AND OPERATING STATUS

14.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to identify and control the inspection, test and operating status of safety-related structures, systems and components for the Grand Gulf Nuclear Station.

14.2 SCOPE

This Policy delineates responsibilities and defines requirements for identifying and controlling the inspection, test and operating status of safety-related items in order to assure that required inspections and tests are performed and the acceptability of items is known, and to prevent the inadvertent operation of items which are in a controlled status.

14.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing functions on safety-related structures, systems and components during the operational phase of nuclear power plant activities.

14.4 RESPONSIBILITY

14.4.1 During the operational phase, responsibility and authority for identifying and controlling the test and operating status of safety-related items, excluding preoperational testing, are delegated to the General Manager, Plant Operations. The Director, Quality has the responsibility and authority for identifying and controlling the inspection, test, and operating status of safety-related items. They are responsible for assuring that procedures are developed and implemented to address the applicable requirements of this Policy.

14.4.2 Organizations supplying safety-related material, equipment and services are responsible for complying with the applicable requirements of this Policy, as stipulated in the procurement documents, and for imposing them on their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

14.4.3 The Manager, Quality Services is responsible for reviewing Plant Administrative Procedures to verify conformance to the applicable requirements of this Policy.

11

14.4 (Continued):

- 14.4.4 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy.

11

14.5 REQUIREMENTS

- 14.5.1 Procedures shall be established and implemented by the organizations responsible for the fabrication, storage, installation, test, and operation of safety-related structures, systems and components to assure that the inspection, test and operating status of such items is identified, controlled and made known to affected organizations.
- 14.5.2 The procedures shall require that the status of inspections and tests be indicated by the use of appropriate status indicators such as stamps, tags, labels, routing cards, shop travelers, or other suitable means. Suitable means may include identification numbers which are traceable to inspection and test records.
- 14.5.3 The procedures shall identify the status indicator to be used and provide for its control, including responsibility and authority for application and removal.
- 14.5.4 Bypassing of required inspections, tests or other critical operations shall be procedurally controlled with concurrence by Quality Programs. Where necessary to preclude inadvertent bypassing of required inspections and tests, the procedures shall provide for the identification of items which have passed such inspections and tests.
- 14.5.5 In cases where documentary evidence is not available to confirm that an item has passed required inspections and tests, that item shall be considered nonconforming and processed in accordance with Policy 15.0. Affected systems shall also be evaluated for operability in accordance with the Technical Specifications and reliance shall not be placed on any such systems (which are evaluated as inoperable) to fulfill their intended safety functions.
- 14.5.6 Procedures shall be provided to require identification of the operating status of systems, components, controls, or support equipment in order to prevent inadvertent or unauthorized operation. These procedures shall require control measures, such as locking or tagging to secure and identify equipment in a controlled status. Independent verification shall be required, where appropriate, to ensure that necessary measures, such as tagging equipment, have been implemented correctly.

14.5 (Continued):

- 14.5.7 Temporary modifications shall be controlled by approved procedures which include a requirement for independent verification. A log shall be maintained of the current status of such temporary modifications.
- 14.5.8 Nonconforming services and nonconforming, inoperative or malfunctioning structures, systems, components or materials shall be identified and controlled in accordance with the requirements of Policy 15.0 of this Manual.

15.0 NONCONFORMING MATERIALS, PARTS OR COMPONENTS
(Including Items, Services and Activities)

15.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to identify and control safety-related items, services or activities for the Grand Gulf Nuclear Station which do not conform to established requirements.

15.2 SCOPE

This Policy delineates responsibilities and defines requirements for the identification and control of nonconforming safety-related items, services or activities in order to assure that the nonconforming conditions do not compromise quality or safety.

15.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing functions on safety-related structures, systems, materials, parts or components during the operational phase of nuclear power plant activities.

15.4 RESPONSIBILITY

15.4.1 Responsibility and authority for the identification, control and disposition of nonconforming items, services and activities during the operational phase are delegated to the Director, Design Engineering GGNS (for engineering); the Manager, Plant Modification & Construction (for implementation of design changes and plant modifications); the Manager, Fuel Fabrication (for nuclear fuel or core items); the General Manager, Plant Operations; the Director, Quality; the Manager, Quality; and the manager of the organization performing the activity. It is the responsibility of these individuals to assure that the requirements of this Policy which are applicable to their scope of activities are implemented in accordance with documented procedures. All personnel are responsible for reporting detected nonconformances in accordance with the procedures applicable to their particular organization.

15.4.2 Organizations supplying material, equipment or services are responsible for complying with the applicable requirements of this Policy, as specified in the procurement documents, and for imposing them on their contractors and suppliers, as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

11

15.4 (Continued):

15.4.3 The Manager, Quality Services is delegated the responsibility for assuring implementation of the identification and control of nonconforming items, services and activities by review or receipt inspection activities during GGNS operational phase activities to verify conformance to the applicable requirements of this Policy. The Manager, Quality Systems is delegated the responsibility for assuring implementation of the identification and control of nonconforming items, services and activities by audit of GGNS operations phase activities to verify conformance to the applicable requirements of this Policy.

11

The Manager, Quality Services is delegated the responsibility for control, processing, tracking, disposition concurrence, verification and closure of non-conformance documents for GGNS operations phase activities to verify conformance to the applicable requirements of this Policy.

11

15.4.4 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with the requirements of the Operational Quality Assurance Program, including the requirements of this Policy. They are also responsible for the periodic review and analysis of NRC and licensee quality deficiency documents to detect possible adverse quality trends.

15.5 REQUIREMENTS

15.5.1 Procedures shall be established by the responsible organizations to identify and control nonconforming safetyrelated items, services and activities. The procedures shall include provisions for identification, documentation, segregation, review, disposition and notification to affected organizations, as appropriate.

15.5.2 The procedures shall:

15.5.2.1 specify the individuals or organizations responsible for the disposition and approval of nonconforming items, services or activities, (including an independent review and acceptance by the appropriate quality organization).

15.5.2.2 provide for documentation to identify the item, service or activity; describe the nonconformance; document the disposition and inspection requirements; and provide signature approval of the disposition.

15.5.2 (Continued):

Unless evaluated as having no impact on satisfactory performance, nonconformances are corrected or resolved prior to the initiation of the preoperational test program on the item.

- 15.5.3 Measures shall be established to procedurally control further processing, delivery or installation of a nonconforming item or continuation of a nonconforming service or activity, pending a decision on its disposition.
- 15.5.4 In order to prevent its inadvertent use or installation, a nonconforming item shall be identified by marking or tagging and shall be physically segregated, where practical. If physical segregation is not practical, identification of the item as nonconforming by marking or tagging shall be acceptable. Where marking or tagging is not feasible, nonconforming items may be controlled by the use of appropriate documentation. Markings or tags used to identify nonconforming items shall be removed after resolution of the nonconforming condition.
- 15.5.5 Nonconforming items, services or activities shall be reviewed and dispositioned in accordance with documented procedures. Items may be dispositioned in the following ways:
- 15.5.5.1 Accept-as-is;
 - 15.5.5.2 Scrap;
 - 15.5.5.3 Rework to conform to a drawing or specification;
 - 15.5.5.4 Repair in accordance with an engineering approved procedure.

Items received without the necessary documentation shall be controlled. Acceptance of such items will be withheld pending receipt of required documentation or the items will be considered nonconforming.

- 15.5.6 The acceptability of rework shall be verified by reinspecting or retesting the item to the original requirements, or by an equivalent method which has been reviewed and approved. The acceptability of repair shall be verified by reinspection, or retesting the item by an engineering approved method even though the item still may not conform to the original requirements. Inspection, testing, rework and repair shall be documented.

OPERATIONAL QUALITY ASSURANCE MANUAL
TITLE: NONCONFORMING MATERIALS, PARTS OR COMPONENTS

15.5 (Continued):

- 15.5.7 For items dispositioned "accept-as-is" or "repair," a description of the change, waiver or deviation shall be documented to record the change and denote the as-built condition. Documentation verifying the acceptability and approval of such items shall also be required.
- 15.5.8 Nonconformance reports with "accept-as-is" or "repair" dispositions submitted by contractors or suppliers shall be reviewed and concurred with by the designated individuals and shall become a part of the inspection records to be submitted with the item.
- 15.5.9 Nonconformance reports shall be periodically reviewed and analyzed to detect possible adverse quality trends, and the results shall be reported to management for review and assessment.

16.0 CORRECTIVE ACTION

16.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide for the correction of conditions adverse to the quality or safety of the Grand Gulf Nuclear Station.

16.2 SCOPE

This Policy delineates responsibilities and defines requirements for the identification, documentation, reporting, and correction of conditions adverse to quality or safety, including requirements for the determination of cause and corrective action to preclude the recurrence of significant conditions adverse to quality or safety.

16.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations performing functions which affect safety-related structures, systems or components during the operational phase of nuclear power plant activities.

16.4 RESPONSIBILITY

16.4.1 Responsibility and authority for the development and control of measures to assure corrective action during the operational phase are delegated to the General Manager, Plant Operations; Director, Design Engineering GGNS; Director, Nuclear Support; Director, Nuclear Engineering Analysis; Director, Nuclear Safety and Regulatory Affairs; Manager, Quality; Director, Materials, Purchasing and Contracts; Director, Central Licensing; Director, Business Services; Director, Maintenance Support; and the Director, Quality. They are responsible for assuring that procedures are established in accordance with the requirements of this Policy to provide for the identification, documentation, and correction of conditions adverse to quality or safety. They are also responsible for assuring that corrective action implemented is designed to prevent recurrence of significant adverse conditions. | 11

16.4.2 All organizations performing quality or safety affecting activities are responsible for incorporating into the appropriate procedures, measures for identifying and reporting conditions which may warrant corrective action. Responsibility for determining and implementing necessary corrective action is delegated to the organization performing or controlling the activity. During the operational phase, the responsibility for the determination and implementation of corrective action onsite, is delegated to the General Manager, Plant Operations. | 11

16.4.2 (Continued):

During implementation of design changes and plant modifications, the Manager, Plant Modification & Construction is responsible for this activity. |11

16.4.3 This section deleted in Revision 4.

16.4.4 Organizations supplying material, equipment or services are responsible for complying with the requirements of this Policy as specified in the appropriate procurement documents, and for imposing them on their contractors and suppliers as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.

16.4.5 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual; to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy; for the periodic review and analysis of NRC and licensee quality deficiency documents to detect possible adverse quality trends; for reporting such items, if any, to the Vice President, Engineering; the Vice President, Operations GGNS; the Senior Vice President, Planning & Assurance; the Vice President, Administrative Services and Regulatory Affairs; and the Vice President, Operations Support for further action. |11

16.5 REQUIREMENTS

16.5.1 Procedures shall be established and implemented by the responsible organizations, consistent with the scope of their activities, to provide measures for the identification, documentation, reporting and correction of conditions adverse to quality or safety.

16.5.2 The procedures shall provide for the evaluation of conditions such as nonconformances, failures, malfunctions, deficiencies, violations, deviations, reportable occurrences, 10CFR21 items, and defective material and equipment to determine the need for corrective action and to identify possible adverse quality trends.

16.5.3 The procedures shall require that action be promptly initiated and adequately documented by the responsible organization to correct the condition and to determine if action is necessary to preclude its recurrence.

OPERATIONAL QUALITY ASSURANCE MANUAL
TITLE: CORRECTIVE ACTION

16.5 (Continued):

- 16.5.4 The documentation to be used to report conditions adverse to quality or safety and request corrective action, and the appropriate distribution and control thereof, shall be specified in the procedures.
- 16.5.5 The procedures shall provide for follow-up reviews by the appropriate organizations to verify proper implementation of the corrective action and to close out the documentation.
- 16.5.6 For significant conditions adverse to quality or safety, the cause of the conditions, and the corrective action taken which is designed to prevent recurrence of the event shall be documented and reported to appropriate levels of management for review.
- 16.5.7 Nonconforming materials, parts and components (including items, services and activities) shall be identified, controlled and dispositioned in accordance with procedures which implement the requirements of Policy 15.0 of this Manual.

17.0 QUALITY ASSURANCE RECORDS

17.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures for the collection, storage, and maintenance of quality assurance records for the Grand Gulf Nuclear Station.

17.2 SCOPE

This Policy delineates responsibilities and defines requirements for the development of a records management system to provide for the collection, storage, and maintenance of quality assurance records. Quality assurance records include those records which furnish documentary evidence of the quality of items and of activities affecting quality.

17.3 APPLICABILITY

The requirements of this Policy apply to all individuals or organizations participating in the collection, storage or maintenance of quality assurance records during the operational phase of nuclear power plant activities.

17.4 RESPONSIBILITY

17.4.1 Responsibility and authority for the development of a records management system are delegated to the Vice President, Operations GGNS. This includes responsibility for the collection, storage and maintenance of quality assurance records generated during design and construction, as well as during the operational phase. He shall assure that records are collected, stored and maintained in accordance with procedures which address the requirements of this Policy. Responsibility for the development of the required procedural controls for the collection, storage and maintenance of quality assurance records is delegated to the General Manager, Plant Operations.

17.4.2 The General Manager, Plant Operations is responsible for the collection, storage and maintenance of records generated onsite and required to be maintained at GGNS including GGNS records generated by the Plant Modification and Construction Section. Such records include those necessary to operate and maintain the facility and meet regulatory requirements. Such records shall be identified in the appropriate Plant Staff Procedures or the Plant Modification and Construction Section Procedures developed to meet the requirements of this Policy.

|11

17.4 (Continued):

- 17.4.3 The Manager, Quality Services and the Manager, Quality Systems are delegated the responsibility for assuring implementation of the collection, storage, and maintenance of those quality assurance records onsite which are under the control of the General Manager, Plant Operations. The Manager, Quality Services is responsible for reviewing Plant Administrative procedures and work documents for and performing inspections to the extent necessary to verify conformance to the requirements of this Policy.
- 17.4.4 The General Manager, Plant Operations is responsible for the collection, storage and maintenance of records related to GGNS. Records to be maintained by the General Manager, Plant Operations shall be identified in the appropriate Administrative Procedures developed to meet the requirements of this Policy.
- 17.4.5 The Director, Quality is responsible for the collection and storage of quality assurance records generated by Quality Programs until such time as they are transmitted to the General Manager, Plant Operations. Such records shall be identified in the appropriate Quality Assurance Procedures developed to meet the requirements of this Policy. | 11
- 17.4.6 Other organizations whose scope of activities require the generation, collection, storage or maintenance of quality assurance records shall establish procedures to assure compliance with the applicable requirements of this Policy. Contractors and suppliers are responsible for complying with the requirements of this Policy to the extent specified in the appropriate procurement documents, and for imposing them on their contractors and suppliers, as applicable. They are also responsible for verifying, through surveillance or audits, that the requirements are being adequately implemented.
- 17.4.7 The Director, Quality and the Manager, Quality have the responsibility for carrying out an audit program, as described in Policy 18.0 of this Manual, to verify conformance with Operational Quality Assurance Program requirements, including the requirements of this Policy. | 11

17.5 REQUIREMENTS

- 17.5.1 A system for the collection, storage and maintenance of quality assurance records including provisions for identification, classification, indexing, retention, preservation, safekeeping, retrievability and disposition shall be established.

17.5 (Continued):

- 17.5.2 The records system shall define requirements and responsibilities for records transmittals, retention, and maintenance, subsequent to the completion of a work activity, consistent with applicable codes, standards and procurement documents. Measures to assure that the required records have been received and are acceptable shall be established.
- 17.5.3 The records system shall provide measures to assure that records are identifiable and retrievable. Retention periods of sufficient duration to assure the ability to reconstruct significant events and satisfy regulatory or statutory requirements shall be specified. Inspection and test records shall contain the following where applicable.
- 17.5.3.1 A description of the type of observation;
- 17.5.3.2 Evidence of completing and verifying a manufacturing, inspection, or test operation;
- 17.5.3.3 The date and results of the inspection or test;
- 17.5.3.4 Information related to conditions adverse to quality;
- 17.5.3.5 Inspector or data recorder identification;
- 17.5.3.6 Evidence as to the acceptability of the results.
- 17.5.4 Storage facilities for quality assurance records shall be designed to prevent records' damage or loss, to the maximum extent practical; or as a satisfactory alternative, duplicate record shall be stored in a separate remote location.
- 17.5.5 Records and documentation requirements are specified in the other Policies of this Manual. Quality assurance records include, but are not limited to: design records, such as specifications and drawings; procurement documents; operating logs and procedures; principal maintenance and modification documents; results of reviews, inspections, tests, audits, material analyses; monitoring of work performance; personnel, procedures, and equipment qualification records; quality deficiency documents; corrective action documents; and LOCFR evaluations (i.e., LOCFR50.59, LOCFR21).

18.0 AUDITS

18.1 PURPOSE

This Policy describes the Operational Quality Assurance Program measures to provide a comprehensive audit program for the Grand Gulf Nuclear Station.

18.2 SCOPE

This Policy delineates responsibilities and defines requirements for the development and implementation of a comprehensive program of planned and documented audits designed to verify compliance with, and assess the effectiveness of, the Operational Quality Assurance Program.

18.3 APPLICABILITY

The requirements of this Policy apply to all internal and external audits performed by or for the licensee during the operational phase of nuclear power plant activities.

18.4 RESPONSIBILITY

18.4.1 Responsibility and authority for the licensee's audit program are delegated to the Director, Quality and the Manager, Quality. They are responsible for the development and implementation of a program of planned and documented audits to verify compliance with all aspects of the Operational Quality Assurance Program and to assess its effectiveness. They are responsible for assuring that procedures are developed, in accordance with the requirements of this Policy, to provide for both internal and external audits. The Director, Quality is responsible for performance of audits to verify plant conformance to the Technical Specifications; audits of operational phase activities; and audits of contractors and suppliers performing onsite activities. The Manager, Quality is responsible for the performance of audits of contractors and suppliers performing offsite activities. They shall also assure that audit results are documented and reported to appropriate management, and that prompt corrective action is taken to eliminate conditions adverse to quality detected during the course of audits.

11
11

18.4.2 This section deleted in Revision 3.

18.4 (Continued):

- 18.4.3 Organizations supplying material, equipment or services are responsible for auditing their internal operations and their contractors and suppliers, as stipulated in the appropriate procurement documents, in order to verify compliance with the quality assurance program requirements specified in the procurement documents.
- 18.4.4 The section deleted in Revision 5.

18.5 REQUIREMENTS

- 18.5.1 A comprehensive program of planned and documented audits shall be established and implemented by Quality Programs, Services Quality Assurance and Supplier Quality Assurance to verify compliance with all aspects of the Operational Quality Assurance Program. The audit program shall be carried out in accordance with written approved procedures which address the requirements of this Policy. | 11
- 18.5.2 The audit program shall provide for both internal and external audits. Internal audits shall include audits of the procedures and performance of all licensee organizations whose activities affect the quality of safety-related structures, systems and components. External audits shall include audits of the practices, procedures and instructions of contractors and suppliers who provide safety-related material, equipment or services.
- 18.5.3 Audits shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items; and review of documents and records.
- 18.5.4 Audits of operating plant activities shall include, as a minimum, those specified in the Technical Specifications for the applicable nuclear generating station.
- 18.5.5 Audits shall be performed by trained, qualified personnel not having direct responsibilities in the areas being audited. Qualification and training requirements for auditors shall be established and documented and records of auditor qualifications shall be maintained and kept current. Personnel selected for quality assurance audit assignments shall have experience or training commensurate with the scope, complexity, or special nature of the activities to be audited.
- 18.5.6 An audit schedule shall be developed, maintained, reviewed and updated, as necessary. The audit schedule shall address the following minimum requirements:

18.5.6 (Continued):

18.5.6.1 Auditing shall be initiated as early in the life of an activity as practical to assure timely implementation of quality assurance program requirements.

18.5.6.2 Audits shall be scheduled on the basis of the status and importance of the activities to be audited.

18.5.6.3 Those specified in the Technical Specifications for the applicable nuclear generating station.

18.5.7 Individual audits shall be performed in accordance with documented plans and checklists which describe the audit and provide for an objective evaluation of the status and adequacy of the areas being audited.

The "objective evaluation" referenced is not to be confused with the evaluation statement in ANSI N45.2.12 to which the licensee has provided a clarification. See Appendix A.

18.5.8 Audit results, including conditions adverse to quality detected during the audit, shall be documented and reviewed with the supervisor or manager having responsibility in the areas audited. Distribution of audit reports shall include management of the audited organization and appropriate licensee management.

18.5.9 Management of the audited organizations shall be responsible for correcting conditions adverse to quality identified during an audit. They shall assure that corrective action is scheduled, accomplished as scheduled, and documented. The corrective action shall be designed to prevent the recurrence of significant conditions adverse to quality. (See also Appendix A, Regulatory Guide 1.144, Item 11.)

18.5.10 Deficient areas shall be reviewed or reaudited on a timely basis to verify implementation of corrective action.

18.5.11 Audit results shall be analyzed to detect adverse quality trends and to evaluate the effectiveness of the Operational Quality Assurance Program. Results of such analyses which indicate adverse quality trends shall be reported to appropriate management for review and assessment.

18.5.12 Records shall be generated and retained for all audits, including individual audit plans, audit reports, written replies, and records of corrective action. (See also Appendix A, Regulatory Guide 1.144, Item 13.)

18.5 (Continued):

- 18.5.13 The licensee interprets the requirements of Technical Specification 6.5.2.8, which requires that audits shall be performed under the cognizance of the SRC, to be met by the following: The SRC shall review the results of audits of nuclear activities conducted in accordance with the GGNS Operational Quality Assurance Program. Audits shall be conducted and results shall be reviewed in the areas listed in Technical Specification 6.5.2.8.

APPENDIX A

Conformance of GGNS Operational Quality Assurance Program to NRC Regulatory Guides and ANSI Standards

In each of the ANSI standards, other documents (i.e., other standards, codes, regulations, tables, or appendices) required to be included as a part of the standard are either identified at the point of reference or are described in a special section of the standard. The specific applicability or acceptability of these listed standards, codes, regulations or appendices is either covered in other specific areas in the Operational Quality Assurance Program, including appendices, or such documents are not considered as Quality Assurance Program requirements, although they may be used as guidance.

NRC Regulatory Guide 1.8 - "Personnel Qualification and Training" (2nd Proposed Revision 2) - Endorses ANSI/ANS 3.1 (Draft 12/79)

The Operational Quality Assurance Program complies with those requirements of Sections 1.0, 2.0, 3.0, 3.1, 3.2, 3.2.1, 3.2.2, 3.2.3, 3.3, 4.0, 4.1, and 4.4.5 of ANSI/ANS 3.1 (Draft 12/79) that are applicable to Quality Programs (both onsite and offsite) with the following clarifications:

- 1) With regard to the term "Bachelor's Degree" as used in the draft Standard, the following qualifications may be considered equivalent to a Bachelor's Degree:
 - a. 4 years of formal schooling in science or engineering,
 - b. 4 years of applied experience at a nuclear facility in the area for which qualification is sought,
 - c. 4 years of operational or technical experience/training in nuclear power, or
 - d. any combination of the above totaling 4 years.

- 2) With regard to Section 4.4.5 of ANSI/ANS 3.1 (Draft 12/79) titled Quality Assurance: The licensee will comply with Paragraph 4.4.5 as originally stated in ANSI/ANS-3.1 - 1978 which reads as follows:

At the time of initial core loading or assignment to the active position, the responsible person shall have six years experience in the field of quality assurance, preferably at an operating nuclear plant, or operations supervisory experience. At least one year of this six years experience shall be nuclear power plant experience in the overall implementation of the quality assurance program. (This experience shall be obtained within the quality assurance organization.) A minimum of one year of this six years experience shall be related technical or academic training. A maximum of four years of this six years experience may be fulfilled by related technical or academic training.

The applicability of this Guide/Standard to other personnel in the licensee's organization is addressed in other Sections of the FSAR and the Technical Specifications of the individual nuclear facility.

NRC Regulatory Guide 1.26 - "Quality Group Classification, and Standards for Water, Steam, and Radioactive Waste Containing Components of Nuclear Power Plants (Rev. 3, 2/76)

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarification:

The licensee may choose not to use the specific A, B, C and D level classification system set forth in this Guide. The licensee generally followed the requirements of this Guide in developing the list of structures, systems and components ("Q" List) to which the program will apply. The licensee "Q" List will describe the items to which the Operational Quality Assurance Program will apply in lieu of the guidance contained in this Regulatory Guide.

NRC Regulatory Guide 1.28 - "Quality Assurance Program Requirements (Design and Construction)" (6/72) - Endorses ANSI N45.2 - 1971.

This Guide and the Standard it endorses have been superseded for operations activities by Regulatory Guide 1.33 and ANSI N18.7 - 1976 which it endorses. The Operational Quality Assurance Program complies with Regulatory Guide 1.33 and ANSI N18.7 - 1976 as stipulated in Appendix A to that Program; therefore, Regulatory Guide 1.28 (Safety Guide 28) and ANSI N45.2 - 1971 which it endorses are not considered necessary and are not included as part of the Program.

NRC Regulatory Guide 1.29 - "Seismic Design Classification" (Rev. 3, 9/78)

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarification:

For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, The licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/administrative requirements included therein shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance or modification shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

NRC Regulatory Guide 1.30 - "Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment" (8/72) - Endorses ANSI N45.2.4 - 1972.

NRC Regulatory Guide 1.30 (Continued):

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/ administrative requirements included therein (subject to the clarifications in item 2 below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).
- 2) Additional clarifications for ANSI N45.2.4 - 1972 are indicated for specific sections below.

Section 1.4 - Definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee commitment to Regulatory Guide 1.74.

Section 2.1 - Planning requirements, when necessary, will be incorporated into maintenance and modification procedures.

Section 2.3 - Procedures and Instructions will be implemented as set forth in Policies 2, 3, 5, 10, and 11 of the Operational Quality Assurance Program and by compliance with the individual nuclear facility Technical Specifications and ANSI N18.7 as set forth in Appendix A to that Program in lieu of the requirements set forth here.

Section 2.4 - Results will be implemented as set forth in Policies 10, 11 and 17 of the Operational Quality Assurance Program and by compliance with ANSI N18.7 as set forth in Appendix A of that Program in lieu of the requirements set forth here.

Section 2.5.2 - Calibration and Control. The third sentence of this section states in part, "... equipment shall be suitably marked to indicate date of next required calibration." The licensee will utilize a computerized system to indicate the calibration status of installed operations measuring and test equipment in lieu of marking or tagging the individual item.

NRC Regulatory Guide 1.30 (Continued):

Section 3 - Preconstruction Verification will be implemented as follows: (1) is required only for modifications; (2) will be implemented with the clarification that "approved instruction manuals" shall be interpreted to mean the manuals provided by the supplier as required by the procurement order--these manuals will not be reviewed and approved, per se, by the licensee; (3) no special checks will be made by the person withdrawing a replacement part from the warehouse--equivalent controls are assured by compliance with ANSI N45.2.2 as set forth in Appendix A to the Operational Quality Assurance Program; and, (4) will be complied with as stated, by individual technicians as part of the maintenance/modification process.

Section 4 - Installation will be implemented by inclusion, as necessary, in the appropriate maintenance or modification procedure, where such procedures are used. Standard licensee maintenance practices require that care be exercised in the six areas listed whether a procedure is required or not.

Section 5.1 - Inspections, including subsections 5.1.1, 5.1.2, and the first sentence in 5.1.3, will be implemented as set forth in Policy 10 of the Operational Quality Assurance Program. The inspection program will incorporate, as applicable, those items listed in these subsections. The remaining sentence in 5.1.3 is covered in equivalent detail in the licensee's commitment to ANSI N18.7, Section 5.2.6; the requirements as set forth in that commitment will be implemented in lieu of the requirements stated here.

Section 5.2 - Tests, including subsections 5.2.1 through 5.2.3, will be implemented as set forth in Policies 3 and 11 of the Operational Quality Assurance Program. The test program will consider the elements outlined in this Section, where applicable, when developing test requirements for inclusion in maintenance and modification procedures. In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post installation test.

Section 6 - Post-Construction Verification is not generally considered applicable at operating facilities because of the scope of the work and the relatively short interval between installation and operation. Where considered applicable, as in modifications, the elements described in this Section will be considered in the development and implementation of inspection and testing programs as described in Policies 3, 10 and 11 of the Operational Quality Assurance Program.

With regard to Section 6.2.1 of ANSI N45.2.4 - 1972 titled Equipment Tests: The last paragraph of this Section deals with tagging and labeling. The licensee will comply with an alternate last paragraph which reads: "Each safety-related item of process instrumentation is identified with a unique number. This number is utilized in instrument maintenance records so that current calibration status,

NRC Regulatory Guide 1.30 - Section 6 (Continued):

including data such as the date of the calibration and identity of person that performed the calibration, can be readily determined. Such information may also be contained on tags or labels which may be attached to installed instrumentation."

Section 7 - Data Analysis and Evaluation will be implemented as stated herein after adding the clarifying phrase "where used" at the beginning of that paragraph.

Section 8 - Records will be implemented by conformance with Policy 17 of the Operational Quality Assurance Program and ANSI N45.2.9 as set forth in Appendix A to that Program.

NRC Regulatory Guide 1.33 - "Quality Assurance Program Requirements (Operation)" (Rev. 2, 2/78) - Endorses ANSI N18.7 - 1976.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) Paragraph C.3 of Regulatory Guide 1.33 (and Section 4.3.4 of ANSI N18.7 which it references) will be implemented as required by the applicable nuclear facility Technical Specifications which define "Subjects Requiring Independent Review."
- 2) Paragraph C.4.a of Regulatory Guide 1.33 (and Section 4.5 of ANSI N18.7 which it references) will be implemented as required by the applicable nuclear facility Technical Specifications which define the "Audit Program" to be conducted. The audit program is further defined and will be implemented as required by the commitment to ANSI N45.2.12 as stated in Appendix A of the Operational Quality Assurance Program.
- 3) Paragraph C.5.a of Regulatory Guide 1.33 (and Section 4.4 of ANSI N18.7 which it references) will be implemented with the clarification that the Plant Safety Review Committee shall perform this activity.
- 4) Paragraph C.5.d of Regulatory Guide 1.33 (and Section 5.2.7.1 of ANSI N18.7 which it references) will be implemented by adding the clarifying phrase "Where practical" in front of the fourth sentence of the fifth paragraph. The Regulatory Guides changing of the two uses of the word "should" in this sentence to "shall" unnecessarily restricts the licensee's options on repair or replacement parts. It is not always practical to test parts prior to use. For modifications where these requirements are not considered practical, a review in accordance with the provisions of 10CFR50.59 will be conducted and documented.

NRC Regulatory Guide 1.33 (Continued):

- 5) Paragraph C.5.e of Regulatory Guide 1.33 (and Section 5.2.13.4 of ANSI N18.7 which it references) will be implemented subject to the same clarifications made for ANSI N45.2.2 elsewhere in Appendix A to the Operational Quality Assurance Program.
- 6) Paragraph C.5.f of Regulatory Guide 1.33 (and Section 5.2.19(2) of ANSI N18.7 which it references) will be implemented with the substitution of the word "practical" for the word "possible" in the last sentence.
- 7) Paragraph C.5.g of Regulatory Guide 1.33 (and Section 5.2.19.1 of ANSI N18.7 which it references) will be implemented with the addition of the modifier "normally" after each of the verbs (should) which the Regulatory Guide converts to "shall." It is the licensee's intent to fully comply with the requirements of this paragraph, and any conditions which do not fully comply will be documented and approved by management personnel. In these cases, the reason for the exception shall also be documented. The documentation shall be retained for the same period of time as the affected preoperational test.
- 8) With regard to Section 3.4.2 of ANSI N18.7 - 1975 titled Requirements for the Onsite Operating Organization: Training standards referenced in this Section will be implemented if such standards are included in Appendix A to the Operational Quality Assurance Program or in Technical Specifications or are otherwise part of the license of the individual nuclear facility. The licensee's method of documenting and otherwise meeting the remainder of the requirements of this Section are set forth in Policies 1 and 2 of the Operational Quality Assurance Program and in the Technical Specifications of the individual nuclear facility.
- 9) With regard to Section 4.1 of ANSI N18.7 - 1976 titled General: The licensee audit program will be implemented in accordance with, and to meet the requirements of: ANSI N45.2.12 as endorsed in Appendix A; Policies 2, 16 and 18 of the Operational Quality Assurance Program; and the requirements of the individual nuclear facility Technical Specifications.
- 10) With regard to Section 4.2 of ANSI N18.7 - 1976 titled Program Description: Two aspects are addressed in this Section: audits and independent reviews. The independent review program is implemented as required by the Technical Specifications of the individual nuclear facility and by Policies 1 and 2 of the Operational Quality Assurance Program. The licensee audit program will be described in accordance with and to meet the requirements of ANSI N45.2.12 as endorsed in Appendix A of the Operational Quality Assurance Program, the requirements of the individual nuclear facility Technical Specifications, and Policies 16 and 18 of the Operational Quality Assurance Program.

NRC Regulatory Guide 1.33 (Continued):

- 11) With regard to Section 4.3 of ANSI N18.7 - 1976 titled Independent Review Process: The requirements of this Section, including all of its subparts, shall be met by compliance with the Technical Specifications' requirements of the individual nuclear facility.
- 12) With regard to Section 4.5 of ANSI N18.7 - 1976 titled Audit Program: The licensee audit program will be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Appendix A; Policies 2, 16, 17 and 18 of the Operational Quality Assurance Program; and the requirements of the individual nuclear facility Technical Specifications.
- 13) With regard to Section 5.1 of ANSI N18.7 - 1976 titled Program Description: The fourth sentence in this Section required a "summary document"; the licensee has submitted Appendix C to the Operational Quality Assurance Program and interprets this Appendix to fulfill the requirements for a summary document.
- 14) With regard to Section 5.2.2 of ANSI N18.7 - 1976 titled Procedure Adherence: The temporary change requirements of this Section are delineated in the Technical Specifications for activities occurring after the Operating License (OL) is issued; the requirements of the Technical Specifications shall be used in lieu of the general requirements in this Section to control temporary changes. For temporary changes which occur under this Program during preoperational and startup testing prior to issuance of an OL, the licensee will comply with this Section with the clarification that another Test Supervisor or Shift Supervisor or other member of the Plant Staff (limited to Shift Superintendent, responsible Section Supervisor, Manager, Plant Operations; or General Manager, Plant Operations) knowledgeable in the areas affected by the change, may approve changes which require the signer to hold an SRO license.

When there is a requirement to "implement" or "address" a procedure, actions prescribed by procedures shall be accomplished. This does not necessarily imply that in all cases the operator, engineer, or technician has a copy of the procedure in-hand and signs-off a checklist as each step or function is performed.

- 15) With regard to Section 5.2.6 of ANSI N18.7 - 1976 titled Equipment Control: The licensee will comply with the "independent verification" requirements based on the definition of this phrase as given under our commitment to Regulatory Guide 1.74.

The third sentence of the fourth paragraph requires independent verification "when appropriate." Where significant exposure to radiation, which is determined by the cognizant Health Physics personnel, would result from such verification, they shall advise Operations of current radiological conditions. Operations will then decide whether or not the confidence gained from the independent verification is worth the additional radiation exposure. In all cases, radiation doses will be As Low As Reasonably Achievable (ALARA).

NRC Regulatory Guide 1.33 - Section 15 (Continued):

Since the licensee sometimes uses descriptive names to designate equipment, the sixth paragraph, second sentence is replaced with: "Suitable means include identification numbers or other descriptions which are traceable to records of the status of inspections and tests."

The first sentence in the seventh paragraph will be complied with after clarifying "operating personnel" to mean trained employees assigned to, or under the control of, licensee management at an operating nuclear facility.

- 16) With regard to Section 5.2.7 of ANSI N18.7 - 1976 titled Maintenance and Modification: Since some emergency situations could arise which might preclude preplanning of all activities, the licensee will comply with an alternate to the first sentence in the second paragraph which reads:

"Except in emergency or abnormal operating conditions where immediate actions are required to protect the health and safety of the public, to protect equipment or personnel, or to prevent the deterioration of plant conditions to a possibly unsafe or unstable level, maintenance or modification of equipment shall be preplanned and performed in accordance with written procedures. Where written procedures would be required and are not used, the activities that were accomplished shall be documented after-the-fact and receive the same degree of review as if they had been preplanned."

For those system run-in activities that take place prior to issuance of an Operating License, the Startup Engineer may direct work by the licensee.

Operations or Maintenance personnel to restore the system to design drawing requirements, provided the work and actions are properly documented and that quality and engineering evaluations are obtained. These evaluations may be obtained after-the-fact.

- 17) With regard to Section 5.2.7.1 of ANSI N18.7 - 1976 titled Maintenance Programs: The licensee will comply with the requirements of the first sentence of the fifth paragraph, where practical. This clarification is needed since it is not always possible to promptly determine the cause of the malfunction. In all cases, the licensee will initiate proceedings to determine the cause, and will make such determinations promptly, where practical.
- 18) With regard to Section 5.2.8 of ANSI N18.7 - 1976 titled Surveillance Testing and Inspection Schedule: In lieu of a "master surveillance schedule," the following requirement shall be complied with: "A surveillance testing schedule(s) shall be established reflecting the status of all in-plant surveillance tests and inspections."

NRC Regulatory Guide 1.33 (Continued):

- 19) With regard to Section 5.2.9 of ANSI N18.7 - 1976 titled Plant Security and Visitor Control: The requirements of the individual nuclear facility Security Plan shall be implemented in lieu of these general requirements.
- 20) With regard to Section 5.2.10 of ANSI N18.7 - 1976 titled Housekeeping and Cleanliness Control: The requirements of this Section, beginning with the last sentence of the first paragraph and continuing through the end of the Section, will be implemented as described in the licensee's commitments to ANSI N45.2.3 and N45.2.1 as set forth in Appendix A to the Operational Quality Assurance Program.
- 21) With regard to Section 5.2.13.1 of ANSI N18.7 - 1976 titled Procurement Document Control: The words "the same" in the last sentence are replaced with the words "an equivalent".
- 22) With regard to Section 5.2.15 of ANSI N18.7 - 1976 titled Review, Approval and Control of Procedures: The third sentence in Paragraph three is interpreted to mean: Applicable procedures shall be reviewed following an accident, an unexpected transient, significant operator error, or equipment malfunction which results in a reportable occurrence. The first sentence in Paragraph four is interpreted to mean: This requirement for routine followup review can be accomplished in several ways, including (but not necessarily limited to): documented step-by-step use of the procedure (such as occurs when the procedure has a step-by-step checkoff associated with it), or detailed scrutiny of the procedure as part of a documented training program, drill, simulator exercise, or other such activity. Grand Gulf Nuclear Station has taken exception to the biennial review process because of programmatic controls that are equivalent to or better than the biennial review process for compliance with ANSI N18.7-1976. These programmatic controls are effected in an effort to ensure that procedures are reviewed for possible revision upon identification of new or revised source material potentially affecting the intent of procedures, thereby maintaining the procedures current. Entergy Operations believes that this approach better addresses the intent of ANSI N18.7-1976 and is more acceptable from both a technical and a practical perspective than a static two-year review process. Procedures which are only used infrequently, i.e., every three to five years, will be reviewed prior to use. A revision of a procedure constitutes a procedure review.
- 23) With regard to Section 5.2.17 of ANSI N18.7 - 1976 titled Inspections: Not all inspections will require generation of a separate inspection report. Inspection requirements may be integrated into appropriate procedures or other documents with the procedure or document serving as the record. However, records of inspections will be identifiable and retrievable.

11

NRC Regulatory Guide 1.33 (Continued):

- 24) With regard to Section 5.3.9 of ANSI N18.7 - 1976 titled Emergency Procedures: As directed by the NRC, the licensee will follow a format for emergency procedures which is "symptom" based as opposed to "event" based as stipulated in Section 5.3.9.1. Since the licensee will have these "symptom" based procedures, "event" based procedures will not normally be provided.
- 25) With regard to Section 5.3.9.2 of ANSI N18.7 - 1976 titled Events of Potential Emergency: NRC review of the FSAR has identified all natural occurrences which affect the nuclear facility. Therefore, the licensee will interpret item (11) to mean the natural occurrences which have been evaluated in the FSAR for the individual nuclear facility.
- 26) With regard to Section 5.3.9.3 of ANSI N18.7 - 1976 titled Procedures for Implementing Emergency Plan: The licensee's NRC accepted Emergency Plan for each nuclear facility will be implemented in lieu of the requirements in this Section.
- 27) With Regard to Section 5.2.18 of ANSI N18.7 - 1976 titled Control of Special Processes: The last four words of the first sentence are clarified by inserting the word "approved" before the word "procedure": We shall use qualified personnel and approved procedures.
- 28) With regard to Section 5.2.7 of ANSI N18.7 - 1976 titled Maintenance and Modification: The first sentence of the first paragraph could be interpreted to require the same degree of inspection for all maintenance activities as was provided during construction. When viewed in conjunction with Section 5.2.17, the third paragraph, we believe the actual intent is clear. We shall provide inspections comparable in nature and extent to that provided during construction if the maintenance/modification work is comparable in nature and extent.
- 29) With regard to Section 5-3.5(4) of ANSI N18.7 - 1976 titled Supporting Maintenance Documents: The licensee may choose to include material from vendor manuals in any of three ways. (1) The applicable section of the manual may be duplicated, referenced in, and attached to the procedure. (2) The procedure may simply state that the manual or a specific section is to be followed for performing a particular function; the manual must then be used in conjunction with the procedure for performing the activity. (3) The pertinent material from the manual, either as originally written or as modified by the author/reviewers of the procedure, may be written into and become a Part of the procedure.

In options, (1) and (3) above, the material meets the requirement to receive "the same level of review and approval as operating procedures" since the material is reviewed as part of the procedure review process. In option (2), the requirements shall be deemed to have been fulfilled by requiring a copy of the pertinent manual (manual sections) to be available to and considered by persons conducting the review of the procedure.

NRC Regulatory Guide 1.33 (Continued):

- 30) With regard to Section 5.2.16 of ANSI N18.7 - 1976 titled Measuring and Test Equipment: The second sentence of the third paragraph states "Records shall be made and equipment suitably marked to indicate calibration status." The licensee will utilize a computerized system to indicate the calibration status of installed operations measuring and test equipment in lieu of marking or tagging the individual item.
- 31) With regard to Section 1 of ANSI N18.7 titled Scope: The fourth and fifth sentences state, "However, applicable sections of this standard should be used as they apply to related activities. Activities included are: Design Changes, Purchasing, Fabricating... ." The licensee does not intend to fabricate, design, assemble, or modify any NRC licensed container to be used to transport radioactive material.

11

NRC Regulatory Guide 1.37 - "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants" (3/73) Endorses ANSI N45.2.1 - 1973.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) With regard to Paragraph C.3 of Regulatory Guide 1.37: The water quality for final flushing of fluid systems and associated components shall be at least equivalent to the quality of the operating system water except for the oxygen and nitrogen content, but this does not infer that chromates or other additives, normally in the system water, will be added to the flush water.
- 2) With regard to Paragraph C.4 of Regulatory Guide 1.37: Expendable materials, such as inks and related products, temperature indicating sticks, tapes, gummed labels, wrapping materials (other than Polyethelene), water soluble dam materials, lubricants, NDT penetrant materials and couplants, which contact stainless steel or nickel alloy surfaces shall not contain lead, zinc, copper, mercury, cadmium and other low melting point metals, their alloys or compounds, as basic and essential chemical constituents. Prescribed maximum levels of water leachable chlorides, total halogens, and sulphur and its compounds shall be imposed on expendable products.
- 3) With regard to Section 5 of ANSI N45.2.1 - 1973 titled Installation Cleaning: The recommendation that local rusting on corrosion resistant alloys be removed by mechanical methods is interpreted to mean that local rusting may be removed mechanically, but the use of other removal means is not precluded.

NRC Regulatory Guide 1.37 (Continued):

- 4) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/administrative requirements included therein (Subject to the stated clarifications) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance or modification shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).
- 5) With regard to Section 1.4 of ANSI N45.2.1 - 1973 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in the licensee's commitment to Regulatory Guide 1.74.
- 6) With regard to Section 9 of ANSI N45.2.1 - 1973 titled Records: The licensee shall maintain records in accordance with and to meet the requirements of Policy 7 of the OQAM and ANSI N45.2.9 as specified in Appendix A.
- 7) Throughout this Standard, references are made to cleanliness associated with initial installation. When this Standard is used for operations, qualified supervisory maintenance personnel determine what items within a particular cleanliness level are appropriate. As an example, the Reactor Internals are initially classified as Level B. Section 3.1.2 requires this cleanliness level to have "metal clean" surfaces and either a visual inspection or dry white-cloth wipe. After use in the reactor coolant system, the licensee does not intend to clean a component until it has a bright "metal clean" surface, nor do we (from an ALARA and accessibility considerations) intend to perform a dry white-cloth wipe.

Components which have been removed from plant systems of established cleanliness levels may be considered to be of the same cleanliness as the system from which they were removed. Such components need not be recleaned prior to reinstallation provided that measures are taken to prevent degradation of the previously existing state of cleanliness.

NRC Regulatory Guide 1.38 - "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants" (Rev. 2, 5/77) - Endorses ANSI N45.2.2 - 1972.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

NRC Regulatory Guide 1.38 (Continued):

- 1) With regard to Section 1.4 of ANSI N45.2.2 - 1972 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74.
- 2) With regard to Section 2.1 of ANSI N45.2.2 - 1972 titled Planning: (first sentence) The specific items to be governed by the Standard shall be identified on the Q List. However, the Standard (as modified by the clarifications in Appendix A) is part of the Operational Quality Assurance Program and will, therefore, be applied to those structures, systems, and components which are included in that Program.
- 3) With regard to Section 2.3 of ANSI N45.2.2 - 1972 titled Results: The specific methods for performing and documenting tests and inspections are given in Policies 10 and 11 of the Operational Quality Assurance Program. The requirements in these Policies will be implemented in lieu of the general requirements here.
- 4) With regard to Section 2.4 of ANSI N45.2.2 - 1972 titled Personnel Qualifications: Specific requirements for personnel qualifications and training are set forth in Policy 2 and in the commitments to training standards in Appendix A of the Operational Quality Assurance Program. These requirements will be implemented in lieu of the general requirements stated in this Section.
- 5) With regard to Section 2.7 of ANSI N45.2.2 - 1972 titled Classification of Items: The licensee may choose not to explicitly use the four level classification system. However, the specific requirements of the Standard that are appropriate to each class will generally be applied to the items suggested in each classification and to similar items.
- 6) With regard to Section 3.2.1 of ANSI N45.2.2 - 1972 titled Level A Items: As an alternate to the requirements for packaging and containerizing items in storage to control contaminants (Items (4) and (5)), the licensee may choose a storage atmosphere which is free of harmful contaminants in concentrations that could produce damage to stored items. Similarly (for Item (7)) the licensee may obviate the need for caps and plugs with an appropriate storage atmosphere, and may choose to protect weld end preparations and threads by controlling the manner in which the items are stored. These clarifications apply whenever items (4), (5) or (7) are subsequently referenced and to Section 3.5.1 titled Caps and Plugs and Section 3&4 titled Methods of Preservation.

NRC Regulatory Guide 1.38 (Continued):

- 7) With regard to Section 3.3 of ANSI N45.2.2 - 1972 titled Cleaning: (Third sentence) The licensee interprets "documented cleaning methods to allow generic cleaning procedures to be written which are implemented, as necessary, by trained personnel. Each particular cleaning operation may not have an individual cleaning procedure, but the generic procedures will specify which methods of cleaning or which type(s) of solvent may be used in a particular application.
- 8) With regard to Section 3.4 of ANSI N45.2.2 - 1972 titled Methods of Preservation: (First sentence) The licensee will comply with these requirements subject to the clarifications of Section 3.2.1 (4) and (5) above, and the definition of the phrase "deleterious corrosion" to mean that corrosion which cannot be subsequently removed and which adversely affects form, fit, or function.
- 9) With regard to Section 3.6 of ANSI N45.2.2 - 1972 titled Barrier and Wrap Material and Dessicants: This section requires the use of nonhalogenated materials in contact with austenitic stainless steel. Refer to Regulatory Guide 1.37 above for the licensee's position.
- 10) With regard to Section 3.7.1 of ANSI N45.2.2 - 1972 titled Containers: Cleated, sheathed boxes may be used up to 1000 lbs. rather than 500 lbs. as specified in 3.7.1(1). This type of box is safe for, and has been tested for, loads up to 1000 lbs. Other national standards allow this (see Federal Specification PPP-B-601). Special qualification testing may be required for loads above 1000 lbs.
- 11) With regard to Section 3.7.2 of ANSI N45.2.2 - 1972 titled Crates and Skids: Crates or skids will be used on equipment with a gross weight of 500 lbs. or more. Skids or runners will normally be fabricated from 2 X 4 inch nominal lumber size, minimum, and laid flat except where this is impractical because of the small dimensions of the container. If forklift handling is required, minimum floor clearance for forklift tines will be provided.
- 12) With regard to Section 4.2.2 of ANSI N45.2.2 - 1972 titled Closed Carriers: The use of fully enclosed furniture vans, as recommended in (2), of this Section is not considered a requirement. The licensee will assure adequate protection from weather or other environmental conditions by a combination of vehicle enclosure and item packaging.
- 13) With regard to Sections 4.3, 4.4 and 4.5 of ANSI N45.2.2 - 1972 titled, respectively, Precautions During Loading and Transit, Identification and Marking, and Shipment from Countries Outside the United States: The licensee will comply with the requirements of these Sections subject to the clarifications taken to other Sections which are referenced therein.

NRC Regulatory Guide 1.38 (Continued):

- 14) With regard to Section 5.2.1 of ANSI N45.2.2 - 1972 titled Shipping Damage Inspection: Warehouse personnel will normally visually scrutinize incoming shipments for damage of the types listed in this Section, this activity is not necessarily performed prior to unloading. Since all required items receive the Item Inspection of Section 5.2.2, separate documentation of the Shipping Damage Inspection is not necessary. Release of the transport agent after unloading and the signing for receipt of the shipment may be all of the action taken to document completion of the Shipping Damage Inspection. Any nonconformances noted will be documented and dispositioned as required by Policy 15 of the Operational Quality Assurance Program. The person performing the visual scrutiny during unloading is not considered to be performing an inspection function as defined under Regulatory Guide 1.74; therefore, while he will be trained to perform this function, he may not be certified (N45.2.6) as an Inspector.

- 15) With regard to Section 5.2.2 of ANSI N45.2.2 - 1972 titled Item Inspection: The second division of this subsection requires six additional inspection activities if an item was not inspected or examined at the source. The licensee will consider that a source inspection has been conducted if the supplier of the item is required to comply with ANSI N45.2.2 for the purchased item and if the supplier's program has been audited and found acceptable in the area (i.e., the supplier performs a source inspection of his supplier or conducts a receipt inspection that includes, as applicable, the six additional items listed).

- 16) With regard to Section 6.1.2 of ANSI N45.2.2 - 1972 titled Levels of Storage: Subpart (2) is replaced with the following:
 - (2) Level B items shall be stored within a fire resistant, weather-tight, and well ventilated building or equivalent enclosure. This building shall be situated and constructed so that it will not normally be subject to flooding; the floor shall be paved or equal, and well drained. If any outside waters should come in contact with stored equipment, such equipment will be labeled or tagged nonconforming, and then the nonconformance document will be processed and evaluated in accordance with Policy 15. Items shall be placed on pallets or shoring or shelves to permit air circulation. The building shall be provided with heating and temperature control or their equivalent to reduce condensation and corrosion. Minimum temperature shall be 40°F and maximum temperature shall be 140°F or less if so stipulated by a manufacturer.

- 17) With regard to Section 6.2.1 of ANSI N45.2.2 - 1972 titled Access to Storage Areas: Items which fall within the Level D classification of the standard will be stored in an area which may be posted to limit access, but other positive controls such as fencing or guards will not normally be provided.

NRC Regulatory Guide 1.38 (Continued):

- 18) With regard to Section 6.2.4 of ANSI N45.2.2 - 1972 titled Storage of Food and Associated Items: The sentence is replaced with the following: "The use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and shall be limited to designated areas where such use or storage is not deleterious to stored items."
- 19) With regard to Section 6.2.5 of ANSI N45.2.2 - 1972 titled Measures to Prevent Entrance of Animals: The sentence is replaced with the following: "Warehouse personnel shall be alert to detect evidence of rodents or small animals in indoor storage areas. If any such evidence is detected, a survey or inspection will be utilized to determine the extent of the damage; exterminators or other appropriate measures shall be used to control these animals to minimize possible contamination and mechanical damage to stored material."
- 20) With regard to Section 6.3.3 of ANSI N45.2.2 - 1972 titled Storage of Hazardous Material: The sentence is replaced with the following: "Hazardous chemicals, paints, solvents, and other materials of a like nature shall be stored in approved cabinets or containers which are not in close proximity to installed systems required for safe shut-down."
- 21) With regard to Section 6.4.2 of ANSI N45.2.2 - 1972 titled Care of Items: The following alternates are provided for indicated subpart:
 - (1) "Items in storage shall have all covers, caps, plugs or other closures intact, or shall be elevated to allow for proper drainage. Methods used to seal openings shall be in accordance with Section 3 of this standard. Covers removed for internal access at any time for any reason shall be immediately replaced and resealed after completion of the purpose for removal."
 - (5) "Space heaters in electrical equipment shall be energized unless a documented engineering evaluation determines that such space heaters are not required."
 - (6) "Large (greater than or equal to 50 HP) rotating electrical equipment shall be given insulation resistance tests on a scheduled basis unless a documented engineering evaluation determines that such tests are not required."
 - (7) "Prior to being placed in storage, rotating equipment weighing over approximately 50 pounds shall be evaluated by engineering personnel to determine if shaft rotation in storage is required; the results of the evaluation shall be documented. If rotation is required, it shall be performed at specified intervals, be documented, and be conducted so that parts receive a coating of lubrication where applicable and so that the shaft does not come to rest in the same position occupied prior to rotation. For long shafts or heavy equipment subject to undesirable bowing, shaft orientation after rotation shall be specified and obtained."

NRC Regulatory Guide 1.38 (Continued):

- 22) With regard to Section 6.5 of ANSI N45.2.2 - 1972 titled Removal of Items from Storage: The licensee does not consider the last sentence of this Section to be applicable to the Operations Phase due to the relatively short period of time between installation and use. The first sentence of the Section is replaced with: "The licensee will develop, issue, and implement a procedure(s) which cover(s) the removal of items from storage. The procedure(s) will assure that the status of all material issued is known, controlled, and appropriately dispositioned."
- 23) With regard to Section 6.6 of ANSI N45.2.2 - 1972 titled Storage Records: The licensee will comply with the requirements of this Section with the clarification that, for record purposes, only the access of personnel without Key Cards into indoor storage areas shall be recorded. Unloading or pick-up of material shall not be considered "access," nor shall inspection by NRC or other regulatory agents, nor shall tours by non-licensee employees who are accompanied by licensee employees.
- 24) With regard to Section 7.3 of ANSI N45.2.2 - 1972 titled Hoisting Equipment: Re-rating of hoisting equipment will be considered only when absolutely necessary. Prior to performing any lift above the load rating, the equipment manufacturer must be contacted for his approval and direction. The manufacturer must be requested to supply a document granting approval for a limited number of lifts at the new rating and any restrictions involved, such as modifications to be made to the equipment, the number of lifts to be made at the new rating, and the test lift load. At all times, the codes governing re-rating of hoisting equipment must be observed.

NRC Regulatory Guide 1.39 - "Housekeeping Requirements for Water-Cooled Nuclear Power Plants" (Rev. 2, 9/77) - Endorses ANSI N45.2.3 - 1973.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18).

When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/ administrative requirements included therein (Subject to the clarifications in item 2 below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance or modification shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

NRC Regulatory Guide 1.39 (Continued):

- 2) Specific clarifications for ANSI N45.2.3 - 1973 are indicated for specific Sections below.

Section 1.4 - Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74.

Section 2.1 - Planning: The licensee may choose not to utilize the five-level zone designation system, but will utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with Company policy in the areas of housekeeping, plant and personnel safety, and fire protection.

Cleanliness will be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This will include, as a minimum, documented cleanliness inspections which will be performed prior to system closure. As necessary, (e.g., the opening is larger than the tools being used) control of personnel, tools, equipment, and supplies will be established when major portions of the reactor system are opened for inspection, maintenance or repair.

Additional housekeeping requirements will be implemented as required for control of radioactive contamination.

Section 2.2 - Procedures and Instructions: Appropriate procedures will be written and implemented.

Section 3.1 - Control of GGNS Area: Not applicable to the Operations Phase.

Section 3.2 - Control of Facilities: The licensee may choose not to utilize the five-level zone designation system, but will utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with Company policy in the areas of housekeeping, plant and personnel safety, and fire protection.

Cleanliness will be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This will include, as a minimum, documented cleanliness inspections which will be performed prior to system closure. As necessary, (e.g., the opening is larger than the tools being used) control of personnel, tools, equipment, and supplies will be established when major portions of the reactor system are opened for inspection, maintenance or repair.

Additional housekeeping requirements will be implemented as required for control of radioactive contamination.

NRC Regulatory Guide 1.39 (Continued):

Section 3.3 - Materials and Equipment: The first paragraph in this Section is not applicable to the Operations phase.

Section 3.4 - Construction Tools, Supplies, and Equipment: Not applicable to the Operations phase.

Section 3.5 - Surveillance, Inspection, and Examination: Subparagraph (1) is not applicable to the Operations phase; (2), (3) and (4) will be implemented.

Section 4 - Records: The requirements of Policy 17 and ANSI N45.2.9 as set forth in Appendix A of the Operational Quality Assurance Program shall be implemented in lieu of the requirements of this Section.

Section 3.2.3 - Fire Protection and Prevention: The accepted Fire Protection Plan shall be used in lieu of the general requirements in this section.

NRC Regulatory Guide 1.58 - "Qualifications of Nuclear Power Plant Inspection, Examination, and Testing Personnel", (Rev. 1, 9/80) - Endorses ANSI N45.2.6 1978.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) The licensee may choose not to apply the requirements of this Guide to those personnel who are involved in day-to-day operations, surveillance, maintenance and certain technical and support services whose qualifications are controlled by Technical Specifications or other Operational Quality Assurance Program commitment requirements.
- 2) With regard to Section 1.2 of ANSI N45.2.6 - 1978 titled Applicability: The third paragraph requires that the Standard be used in conjunction with ANSI N45.2; the licensee no longer specifically commits to ANSI N45.2 in the Operational Quality Assurance Program. The fourth paragraph requires that the Standard be imposed on personnel other than licensee employees; the applicability of the Standard to suppliers will be documented and applied, as appropriate, in the procurement documents for such suppliers.
- 3) With regard to Section 1.4 of ANSI N45.2.6 - 1978 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74.

NRC Regulatory Guide 1.58 (Continued):

- 4) With regard to Section 2.5 of ANSI N45.2.6 - 1978 titled Physical: The licensee will implement the requirements of this Section with the stipulation that, where no special physical characteristics are required, none will be specified. The converse is also true: If no special physical requirements are stipulated by the licensee, none are considered necessary.
- 5) With regard to Section 3.5 of ANSI N45.2.6 - 1978 titled Education and Experience - Recommendations: The licensee reserves the right to use personnel who do not meet all the educational and experience requirements of this Section provided: The use of personnel who do not meet these requirements shall be the exception rather than the rule and each such case shall receive a documented management evaluation and justification for the exception. An example of a documented management evaluation and justification would be one which includes objective criteria (examination, review of actual work performed) to demonstrate that equivalent competence is possessed by such an individual.

NRC Regulatory Guide 1.64 - "Quality Assurance Requirements for the Design of Nuclear Power Plants" (Rev. 2, 6/76) - Endorses ANSI N45.2.11 - 1974.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/ administrative requirements included therein (subject to the clarifications listed below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes and inspection requirements).
- 2) With regard to Paragraph C.2(1) of Regulatory Guide 1.64: If in an exceptional circumstance the designer's immediate Supervisor is the only technically qualified individual available, this review can be conducted by the Supervisor, providing that: (a) the other provisions of the Regulatory Guide are satisfied, and (b) the justification is individually documented and approved in advance by the Supervisor's management, and (c) quality assurance audits cover frequency and effectiveness of use of Supervisors as design verifiers to guard against abuse.

NRC Regulatory Guide 1.64 (Continued):

- 3) With regard to Section 1.4 of ANSI N45.2.11 - 1974 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74.
- 4) With regard to Sections 2.1 (last paragraph), 2.2 (Items 12 and 13), Section 9, and Section 11 (including subsections 11.1 through 11.7) of ANSI N45.2.11 - 1974: The Licensee's Audit Program will be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Appendix A: Policies 2, 3, 16 and 18 of the Operational Quality Assurance Program, and the requirements of the individual nuclear facility Technical Specifications in lieu of the audit requirements stated in the referenced sections.
- 5) With regard to Section 5.2.4 of ANSI N45.2.11 - 1974 titled Documentation: For the documentation of interdisciplinary design reviews, there must be documented evidence of the acceptability of design documents or portions thereof, prior to release (material, stress, physics, mechanical, electrical, concrete, etc.). The signature or initials of those who determine the acceptability of the design relative to their respective disciplinary area of concern should be on the document or on a separate form traceable to the document. A document that indicates the reviewer's comments need not be retained.
- 6) The licensee does not require the SAR to be a design document. However, if the SAR contains any design or design input that has not been previously documented, reviewed and approved in accordance with the requirements contained in the OQAM or another approved design control Quality Assurance program and if the SAR is used as a design document during the design process, that specific information must be controlled and verified in accordance with the commitments here and Policy 3 of the OQAM.
- 7) With regard to Section 6.1 of ANSI N45.2.11 - 1974 titled General: The third paragraph in this Section stipulates certain requirements relative to "the results of design verification". The licensee may comply with these requirements by having the Reviewer(s) sign and date an appropriate document providing the following conditions are also met:
 - a) Documented engineering/design procedures are established which cover the extent of design review.
 - b) The procedures identify the duties of the Reviewer and the extent of this responsibility for which he attests with his signature.
 - c) The procedures specify the extent of documentation necessary for the type of design verification applicable to the complexity of the design.

NRC Regulatory Guide 1.64 - Section 7 (Continued):

- d) The signature and date is affixed in accordance with the procedures.

The licensee shall also permit initials to be used in lieu of the signature required above IF a file is maintained to correlate characteristic initials versus individuals such that each set of characteristic initials can be traced to an individual. This correlation must be readily available to NRC inspector whenever the document is being used.

- 8) The timing of design verification is not mentioned in the Standard. The licensee shall perform verification in a timely manner. If other than by qualifications testing of a prototype or lead production unit, verification should be completed prior to release for procurement, manufacturing or construction or release to another organization for use in other design activities. In those cases where this timing cannot be met, the design verification may be deferred, providing that the justification for this action is documented and the unverified portion of the design output document and all design output documents, based on the unverified data, are appropriately identified and controlled. Site GGNS activities associated with a design or design change shall not proceed without verification past the point where the installation would become irreversible without extensive demolition and rework. In all cases, the design verification shall be completed prior to relying upon the component, system, or structure to perform its safety-related function.
- 9) With regard to Section 10 of ANSI N45.2.11 - 1974 titled Records: The licensee shall maintain records in accordance with and to meet the requirements of Policy 17.0 of the OQAM and ANSI N45.2.9 as specified in Appendix A. The additional requirements of the first sentence of the second paragraph in this Section shall also be met.

NRC Regulatory Guide 1.74 - "Quality Assurance Terms and Definitions" (2/74)
Endorses ANSI N45.2.10 - 1973.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) The licensee reserves the right to define additional words or phrases which are not included in this Standard. Such additional definitions will be documented in appropriate procedures and/or in attachments/appendices to the Quality Assurance Procedures Manual, or in Policies of the Operational Quality Assurance Program. See Policy 2, Paragraph 2.5.8.

ARC Regulatory Guide 1.74 (Continued):

- 2) The licensee reserves the right to add additional words/phrases to those definitions listed in this standard and other ANSI standards as necessary for clarification provided such clarification does not change the intent of the definition. Additionally, the licensee considers the point of application to be the procedure in which the word/phase is defined and used. Also, the licensee considers words/phrases defined in procedures, which are not otherwise defined, to be applicable only to the activity controlled under the procedure.

In addition to the Standard's definition of "Inspection", the licensee will use the following: "Inspection (When used to refer to activities that are NOT performed by Quality Programs' personnel) - Examining, viewing closely, scrutinizing, looking over or otherwise checking activities. Personnel performing these functions are not necessarily certified to ANSI N45.2.6."

When the licensee intends for Inspections to be performed in accordance with the Operational Quality Assurance Program by personnel certified as required by that Program and for activities defined by "Inspection" in ANSI N45.2.10, appropriate references to Quality Programs which will perform the activity or to Quality Assurance Procedures/ Instructions to be used for performing the activity will be made. If such references are NOT made, inspections are to be considered under the additional definition given above.

Inspections to meet the intent of 10CFR50 Appendix B are described in Policy 10 of the OQAM.

- 3) In addition to the Standard's definition of "procurement documents", the licensee will utilize the definitions given in ANSI N45.2.13 and in Regulatory Guide 1.74. The compound definition is given as follows: "Procurement documents - Contractually binding documents that identify and define the requirements which items or services must meet in order to be considered acceptable by the purchaser. They include documents which authorize the seller to perform services or supply equipment, material or facilities on behalf of the purchaser (e.g., contracts, letters of intent, work orders, purchase orders, or proposals and their attachment, drawings, specifications, or instructions which define requirements for purchase)."
- 4) "Program Deficiencies" (Not defined in ANSI N45.2.10, but used and defined in ANSI N45.2.12) - Failure to develop, document or implement effectively any applicable element of the Operational Quality Assurance Program.
- 5) "Quality Assurance Program Requirements" (Not defined in ANSI N45.2.10 but used and defined differently in ANSI N45.2.13) Those individual requirements of the Operational Quality Assurance Program which, when invoked in total or in part, establish the requirements of the quality assurance program for the activity being controlled. Although not specifically used in the Operational Quality Assurance Program, ANSI N45.2 may be imposed upon the licensee's suppliers.

NRC Regulatory Guide 1.74 (Continued):

- 6) This section deleted in Revision 4.
- 7) "Independent Verification" - Verification by an individual other than the person who performed the operation or activity being verified that required actions have been completed. Such verification will not require confirmation of the identical action when other indications provide assurance or indication that the prescribed activity is in fact complete. Examples include, but are not limited to: verification of a breaker opening by observing remote breaker indication lights; verification of a set point (made with a voltmeter or ammeter for example) by observing the actuation of status or indicating lights at the required panel-meter indicated value, verification that a valve has been positioned by observing the starting or stopping of flow on meter indications or by remote valve positions indicating lights.
- 8) "NRC accepted Construction Quality Assurance Program" - (1) a program for design or construction which was reviewed by the Quality Assurance organization of the NRC and accepted for use; (2) the revision of that NRC accepted program which is in effect at the time that the licensee authorizes commencement of work; and, (3) a program which the licensee's quality assurance organization reviews and concurs that the Quality Assurance Program controls are acceptable for the activity to be performed. (Reference: OQAM 3.5.18)
- 9) "Special Processes" - Processes which are controlled and monitored in accordance with approved procedures where required quality levels cannot be assured by inspection of the processed articles alone, or where it is more effective to control the process than inspect the completed article.
- 10) "Permanent Plant Device" (when used with respect to instrumentation) - A device, permanently installed, which functions as a part of a system and is used for monitoring a process variable in the plant.
- 11) "Concurrence" (when used with respect to and in association with a review activity) is defined to mean: (1) a review of a document or portion thereof under consideration; (2) a conclusion that all pertinent and necessary requirements (within the purview of the or performing the review) have been included; and, (3) essential agreement and belief that the manner in which the requirements have been addressed will produce the intended results.
- (2) "Audits" (defined in ANSI N45.2.10 but used and defined differently in ANSI N45.2.12) Audit - A documented activity performed in accordance with written procedures or checklists to verify, by examination and evaluation of objective evidence, that applicable elements of the quality assurance program have been developed, documented and effectively implemented in accordance with specific requirements. An audit should not be confused with surveillance or inspection for the sole purpose of process control or product acceptance.

NRC Regulatory Guide 1.88 - "Collection, Storage and Maintenance of Nuclear Power Plant Quality Assurance Records" (Rev. 2, 10/76) - Enforces ANSI N45.2.9 - 1974.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) With regard to Section 3.2.1 of ANSI N45.2.9 - 1974 titled Generation of Quality Assurance Records: The phrase "completely filled out" is clarified to mean that sufficient information is recorded to fulfill the intended purpose of the record, and it is considered complete. Only complete records are considered QA records.
- 2) With regard to Section 3.2.2 of ANSI N45.2.9 - 1974 titled Index: The phrase "an index" is clarified to mean a collection of documents or indices which, when taken together, supply the information attributed to "an index" in the Standard.

11

The specific location of a record within a storage area may not be delineated (e.g., The specific location within a computer record file may not be constant. Further, the licensee may utilize a computer assisted random access, filing system where such location could not be readily "documented, nor would such a location be "relevant.") The storage location will be delineated, but where file locations change with time, the specific location of a record within that file may not always be documented.

- 3) With regard to Section 4.2 of ANSI N45.2.9 - 1974 titled Timeliness: The licensee's contractual agreement with its contractors and suppliers will constitute fulfillment of the requirements of this Section.
- 4) With regard to Section 5.4 of ANSI N45.2.9 - 1974 titled Preservation: The following clarification is substituted for the current subsection 5.4.2: "Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers."

The following clarification is substituted for the current subsection 5.4.3: "Provisions shall be made for special processed records (such as radiographs, photographs, negatives, microfilm and magnetic media) to prevent damage from excessive light, stacking, electromagnetic fields, temperature and humidity as appropriate to the record type.

- 5) With regard to Section 5.5 of ANSI N45.2.9 - 1974 titled Safekeeping: Routine general office and nuclear site security systems and access controls are provided; no special security systems shall be established for record storage areas.

NRC Regulatory Guide 1.88 (Continued):

- 6) With regard to Section 5.6 of ANSI N45.2.9 - 1974 titled Facility: This Section provides no distinction between temporary and permanent facilities. To cover temporary storage, the following clarification is added: "Quality Assurance records will be stored in one-hour fire rated file cabinets. In general, records shall not be maintained in temporary storage for more than three months after completion. Any exceptions to this requirement must be evaluated and approved by the Director, Quality; a list of all such excepted records shall be maintained and available for NRC review. Exceptions may include records needed on a continuing basis for an extended period of time (e.g., personnel qualification and training records, equipment history records) and records which are cumulative in nature (e.g., nonconforming item logs)."

11

Paragraph 4, subsection 3 is clarified to require a two-hour minimum fire rating to be consistent with the 1979 version of the Standard and NRC Criteria for Record Storage Facilities (Guidance-ANSI N45.2.9, Section 5.6) issued 7/1/80.

Paragraph 4, subsection 9 is clarified to read: "No pipes or penetrations except those providing fire protection, lighting, temperature/humidity control, or communications are to be located within the facility. All such penetrations shall be sealed or dampered to comply with a minimum two-hour fire protection rating."

- 7) With regard to Section 5.3 of ANSI N45.2.9 - 1974 titled Storage: The first sentence is clarified by stating that an individual shall be designated and assigned the responsibility for enforcement of written record storage procedures for each record storage location. The term "custodian" may or may not be used as part of that designation.

NRC Regulatory Guide 1.94 - "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel during the Construction Phase of Nuclear Power Plants" (Rev. 1, 4/76) - Endorses ANSI N45.2.5 1974.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/ administrative requirements included therein shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with maintenance and modifications shall be

NRC Regulatory Guide 1.94 - Section 1 (Continued):

the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes and inspection requirements).

- 2) With regard to Section 1.2 of ANSI N45.2.5 - 1974 titled Applicability: The first sentence in this Section is not applicable to the operations phase. The licensee shall comply with the third sentence in this Section with the clarifications that "importance of the item or service involved" is interpreted to mean those to which the Operational Quality Assurance Manual applies, and the extent of coverage shall be defined by supervisory maintenance personnel by the way in which they implement the other requirements of this Standard.

In the second paragraph of this Section, the licensee shall substitute the words "maintenance and modification" for the word "construction" as the modifier of "procedures".
- 3) With regard to Section 1.3 of ANSI N45.2.5 - 1974 titled Responsibility: This Section's requirements are met by the definitions for positions and the organizational responsibilities outlined in the Technical Specifications, Policy 1 of the OQAM and the position descriptions for plant personnel.
- 4) With regard to Section 1.4 of ANSI N45.2.5 - 1973 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used: All definitions which are included in ANSI N45.2.10 shall be used as clarified in the licensee's commitment to Regulatory Guide 1.74.
- 5) With regard to Section 2.1 of ANSI N45.2.5 - 1974 titled Planning: Planning requirements, when necessary, shall be incorporated into maintenance and modification procedures.
- 6) With regard to Section 2.5.2 of ANSI N45.2.5 - 1974 titled Calibration and Control: The last sentence of this section requires that all items inspected with M&TE which is found to be out of calibration shall be considered unacceptable. The licensee will comply with an alternate which will require evaluation to determine the validity of previous measurements. This alternative is consistent with ANSI N45.2.4, Section 2.5.2; ANSI N45.2.1, Section 2.5.2; ANSI N45.2.8, Section 2.8.2; ANSI N45.2.13, Section 7.4.2, and ANSI N18.7, Section 5.2.16.
- 7) With regard to Section 5.5 of ANSI N45.2.5 - 1974 titled Welding: The licensee will comply with inspection requirements of the applicable welding codes identified in the UFSAR and any exceptions thereto.

NRC Regulatory Guide 1.116 - "Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems" (Rev. 0-R, 6/76)
Endorses ANSI N45.2.8 - 1975.

NRC Regulatory Guide 1.116 (Continued):

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, the licensee shall either control these activities under this Operational Quality Assurance Program or under an NRC accepted Construction Quality Assurance Program (Per OQAM 3.5.18). When this Operational Quality Assurance Program is used, the licensee shall comply with the Regulatory Position established in this Regulatory Guide in that Quality Assurance programmatic/ administrative requirements included therein shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).
- 2) With regard to Section 1.1 of ANSI N45.2.8 - 1975 titled Scope: The last paragraph of this Section is not applicable to the operations phase. The applicable portions of the requirements of this Standard shall also be applied after fuel load; therefore, the last twenty-two words in the last sentence of the second paragraph under this Section are also not appropriate to the operations phase.
- 3) With regard to Section 1.2 of ANSI N45.2.8 - 1975 titled Applicability: The first sentence in this Section is not applicable to the operations phase. The licensee shall comply with the third sentence in this Section with the clarifications that "important mechanical systems to be covered" is interpreted to mean those to which the OQAM applies, and the extent of coverage" shall be defined by supervisory maintenance personnel by the way in which they implement the other requirements of this Standard.
- 4) With regard to section 1.3 of ANSI N45.2.8 - 1975 titled Responsibility: This Section's requirements are met by the definitions for positions and the organizational responsibilities outlined in the Technical Specifications, Policy 1 of the OQAM and the position descriptions for plant personnel.
- 5) With regard to Section 1.4 of ANSI N45.2.8 - 1975 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used: All definitions which are included in ANSI N45.2.10 shall be used as clarified in the licensee's commitment to Regulatory Guide 1.74.
- 6) With regard to Section 2.1 of ANSI N45.2.8 - 1975 titled Planning: Planning requirements, when necessary, shall be incorporated into maintenance and modification procedures.

NRC Regulatory Guide 1.123 - "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants" (Rev. 1, 7/77) Endorses ANSI N45.2.13 - 1976.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) With regard to Section 1.3 of ANSI N45.2.13 - 1976 titled Definitions: With two exceptions (Procurement Document and Quality Assurance Program Requirements) definitions in this Standard which are not included in ANSI N45.2.10 will be used; all definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74. The two exceptions are defined in Appendix A under Regulatory Guide 1.74.
- 2) With regard to Section 1.2.2 of ANSI N45.2.13 - 1976 titled Purchaser's Responsibilities: Item c is one of the options which may be used by the licensee to assure quality; however, any of the options given in 10CFR50, Appendix B, Criterion VII as implemented by Policies 4 and 7 of the Operational Quality Assurance Program may also be used.
- 3) With regard to Section 3.1 of ANSI N45.2.13 - 1976 titled Procurement Document Preparation, Review and Change Control: The phrase "the same degree of control" is stipulated to mean "equivalent level of review and approval." The changed document may not always be rereviewed by the originator; however, at least an equivalent level of management/supervision shall review and approve any changes.
- 4) With regard to Section 3.4 of ANSI N45.2.13 - 1976 titled Procurement Document Control: The licensee will meet the requirements of Policies 4 and 7 of the Operational Quality Assurance Program in lieu of the requirements specified in this Section.
- 5) With regard to Section 5.3 of ANSI N45.2.13 - 1976 titled Preaward Evaluation: The licensee will comply with an alternate paragraph which reads: "Except in unusual circumstances (e.g., replacement parts are needed to preclude the development of some unsafe condition at a nuclear facility), a preaward evaluation of the Supplier shall be performed as required by the Operational Quality Assurance Program."
- 6) With regard to Section 6.4 of ANSI N45.2.13 - 1976 titled Control of Changes in Items or Services: The phrase "the Operational Quality Assurance Program" will be inserted in lieu of "ANSI N45.2, Section 7."

NRC Regulatory Guide 1.123 (Continued):

- 7) With regard to Section 8.2 of ANSI N45.2.13 - 1976, titled Disposition: The third sentence of item b is revised to read:

"Nonconformances to the contractual procurement requirements or Purchaser approved documents which consist of one or more of the following shall be submitted to the Purchaser for approval of the recommended disposition prior to shipment when the nonconformance could adversely affect the end use of a module or shippable component # relative to safety, interchangeability, operability, reliability, integrity, or maintainability:

- 1) Technical or material requirement is violated;
- 2) Requirement for supplier documents, which have been approved by the Purchaser, is violated;
- 3) Nonconformance cannot be corrected by continuation of the original manufacturing process or by rework; and/or
- 4) The item does not conform to the original requirement even though the item can be restored to a condition such that the capability of the item to function is unimpaired."

A module is an assembled device, instrument, or piece of equipment identified by serial number or other identification code, having been evaluated by inspection and/or test for conformance to procurement requirements regarding end use. A shippable component is a part or subassembly of a device, instrument, or piece of equipment which is shipped as an individual item and which has been evaluated by inspection and/or test for conformance to procurement requirements regarding end use.

- 8) With regard to Section 12 of ANSI N45.2.13 - 1976 titled Audit of Procurement Program: The licensee audit program will be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Appendix A; Policies 2, 4 and 18 of the Operational Quality Assurance Program, and the requirements of the individual nuclear facility Technical Specifications.
- 9) Paragraph C.5.e of Regulatory Guide 1.123 (and Section 10.3.4 of ANSI N45.2.13 which it references), shall be implemented as originally written (i.e., with the verb "should" instead of the verb "shall"). This flexibility is necessary because the licensee may not always be able to obtain agreement with a Supplier. The licensee retains the ultimate responsibility for performance of purchased equipment. The appropriate engineering discipline will exercise this management/engineering prerogative with respect to the final decision on post installation test requirements.
- 10) With regard to Section II of ANSI N45.2.13 - 1976 titled Quality Assurance Records: The licensee shall maintain records in accordance with and to meet the requirements of Policy 17 of the OQAM and ANSI N45.2.9 as specified in Appendix A.

NRC Regulatory Guide 1.144 - "Auditing of Quality Assurance Programs for Nuclear Power Plants" (Rev. 1, 9/80) - Endorses ANSI N45.2.12 - 1977.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) With regard to Section 1.4 of ANSI N45.2.12 - 1977 titled Definitions: With two exceptions (Program Deficiencies and audits) the definitions in this Standard which are not included in ANSI N45.2.10 will be used: All definitions which are included in ANSI N45.2.10 will be used as clarified in the licensee's commitment to Regulatory Guide 1.74. The excepted definitions are defined in Appendix A under Regulatory Guide 1.74.
- 2) With regard to Section 2.2 of ANSI N45.2.12 - 1977 titled Personnel Qualification: The qualification of licensee audit personnel will be accomplished as described to meet the requirements of ANSI N45.2.23 1978 as endorsed in Appendix A and Policies 2 and 18 of the Operational Quality Assurance Program.
- 3) With regard to Section 2.3 (and subsections 2.3.1 through 2.3.3) of ANSI N45.2.12 - 1977 titled Training: The training of licensee audit personnel will be accomplished as described to meet the requirements of ANSI N45.2.23 - 1978 as endorsed in Appendix A and Policies 2 and 18 of the Operational Quality Assurance Program.
- 4) With regard to Section 2.4 of ANSI N45.2.12 - 1977 titled Maintenance of Proficiency: The maintenance of proficiency of licensee audit personnel will be accomplished as described to meet the requirements of ANSI N45.2.23 1978 as endorsed in Appendix A and Policies 2 and 18 of the Operational Quality Assurance Program.
- 5) With regard to Section 3.3 of ANSI N45.2.12 - 1977 titled Essential Elements of the Audit System: The licensee will comply with subsection 3.3.5 as it was originally written (subsection 3.2.5) in ANSI N45.2.12, Draft 3, Revision 4: "Provisions for reporting on the effectiveness of the quality assurance program to the responsible management." For the auditing organization (licensee), effectiveness is reported as required by the individual nuclear facility Technical Specifications and paragraphs (currently numbered 1.3.1, 1.3.2 and 1.3.15) in Policy 1 of the Operational Quality Assurance Program. Other than audit reports, the licensee may not directly report on the effectiveness of the quality assurance programs to the audited organization when such organizations are outside of the licensee.

Subsection 3.3.6 requirements are considered to be fulfilled by compliance with the organization and reporting measures outlined in the Operational Quality Assurance Program.

NRC Regulatory Guide 1.144 (Continued):

Subsection 3.3.7 requires verification of effective corrective action on a "timely basis." Timely basis is interpreted to mean within the framework or period of time for completion of corrective action that is accepted by the organization. Each finding requires a response and a corrective action completion date; these dates are subject to revision (with the approval of Quality Programs or Supplier Quality Assurance) and must be escalated to higher authority when there is a disagreement between the audited and the auditing organization on what constitutes "timely corrective action."

- 6) With regard to Section 3.5 of ANSI N45.2.12 - 1977 titled Scheduling: Subsection 3.5.3.1 is interpreted to mean that the licensee may procedurally control qualification of a contractor's or supplier's quality assurance program prior to awarding a contract or purchase order by means other than audit.
- 7) With regard to Section 4.3.1 of ANSI N45.2.12 - 1977 titled Pre-Audit Conference: The licensee will comply with the requirements of this Section by inserting the word "Normally" at the beginning of the first sentence. This clarification is required because, in the case of certain unannounced audits or audits of a particular operation or work activity, (monitoring audit) a pre-audit conference might interfere with the spontaneity of the operation or activity being audited. In other cases, persons who should be present at a pre-audit conference may not always be available; such lack of availability should not be an impediment to beginning an audit. Even in the above examples, which are not intended to be all inclusive, the material set forth in Section 4.3.1 will be covered (if considered necessary or desirable as determined by the Audit Team Leader by signature on the audit report) during the course of the audit.
- 8) With regard to Section 4.3.2 of ANSI N45.2.12-1977 titled Audit Process:
 - (a) Subsection 4.3.2.2 could be interpreted to limit auditors to the review of only objective evidence; sometimes and for some program elements, no objective evidence may be available. The licensee will comply with an alternate sentence which reads: "When available, objective evidence shall be examined for compliance with quality assurance program requirements. If subjective evidence is used (e.g., personnel interviews) then the audit report must indicate how the evidence was obtained."
 - (b) Subsection 4.3.2.4 is modified as follows to take into account the fact that some conditions adverse to quality are virtually "obvious" with respect to the needed corrective action: "When a condition adverse to quality is identified as a result of an audit, unless the apparent cause, extent, and corrective action are readily evident, further investigation shall be conducted by the audited organization in an effort to identify the cause and effect and to determine the extent of the corrective action required."

NRC Regulatory Guide 1.144 - Section 8 (Continued):

- (c) Subsection 4.3.2.5 contains a recommendation which is clarified with the definition of "acknowledged by a member of the audited organization" to mean that "a member" of the audited organization has been informed of the findings; it does not mean that that person agrees with the findings. Agreement or disagreement with a finding may be expressed in the response from the audited organization.
 - (d) Subsection 4.3.2.7 is not considered applicable as written. The licensee will comply with an alternate sentence which reads: "Corrective action taken as a result of the last previous audit of the same area shall be reviewed or reaudited, if necessary, to evaluate the effectiveness of the action to resolve the identified condition adverse to quality."
- 9) With regard to Section 4.3.3 of ANSI N45.2.12 - 1977 titled Post-Audit Conference: The licensee will substitute and comply with the following paragraph: "For all external audits, a post-audit conference shall be held with management of the audited organization to present audit findings and clarify misunderstandings; where no adverse findings exist, this conference may be waived by management of the audited organization: such waiver shall be documented in the audit report. Unless unusual operating or maintenance conditions preclude attendance by appropriate managers/supervisors, a post-audit conference shall be held with managers/supervisors for all internal audits for the same reasons as above. Again, if there are no adverse findings, management of the internal audited organization may waive the post-audit conference: such waiver shall be documented in the audit report."
- 10) With regard to Section 4.4 of ANSI N45.2.12 - 1977 titled Reporting:
- (a) This Section requires that the audit report shall be signed by the audit team leader; this is not always the most expeditious route to take to assure that the audit report is issued as soon as practical. The licensee will comply with Section 4.4 as clarified in the following opening: "An audit report, which shall be signed by the audit team leader, or his supervisor in his absence, shall provide:" In cases where the audit report is not signed by the Lead Auditor due to his absence, one record copy of the report must be signed by the Lead Auditor upon his return. The report shall not require the Lead Auditor's review/concurrence/ signature if the Lead Auditor is no longer employed by the licensee at the time the audit report is issued.
 - (b) The licensee will comply with subsection 4.4.3 clarified to read: "Supervisory level personnel with whom significant discussions were held during the course of pre-audit (where conducted), audit, and post-audit (where conducted) activities."

NRC Regulatory Guide 1.144 - Section 10 (Continued):

- (c) Audit reports may not necessarily contain an evaluation statement regarding the effectiveness of the quality assurance program elements which were audited, as required by subsection 4.4.4, but they will provide a summary of the audited areas and the results.
 - (d) Subsection 4.4.6 requires audit reports to include recommendations for corrective actions; the licensee may choose not to comply with this requirement. Instead, licensee auditors/lead auditors are required to document all adverse audit findings. The procedure for processing quality deficiency documents allows the auditor/lead auditor to document actions which are considered necessary to correct the finding, the auditor/lead auditor may also document actions which are considered unacceptable for correcting the finding: the quality deficiency document with these "Auditor Recommendations" is then transmitted to the audited organization. In addition, appropriate Quality Programs, Services Quality Assurance, or Supplier Quality Assurance personnel are required to review corrective action taken for the condition adverse to quality document and determine if it is acceptable. Any disagreements must be escalated to higher management for resolution.
 - (e) The last paragraph in Section 4.4 deals with distribution of audit reports. The licensee will comply with these requirements after substituting the following for the last sentence: "The audit report shall be issued within thirty working days after the last day of the audit."
- 11) With regard to Section 4.5.1 of ANSI N45.2.12 - 1977 titled By Audited Organization: The licensee will comply with the following clarification of this Section: "Management of the audited organization or activity shall review and investigate all adverse audit findings, as necessary, to determine and schedule appropriate corrective action including action to prevent recurrence. They shall respond, in writing, within thirty working days after the date of issuance of quality deficiency documents generated as a result of the audit clearly stating the corrective action taken or planned to prevent recurrence and the results of the investigation if conducted. However, written response is not necessary if corrective action is taken and verified prior to issuance of the audit report. The audited organization shall take appropriate action to assure that corrective action is accomplished as scheduled." The Director, Quality or the Manager, Quality, as applicable, may, at their discretion, waive the requirement for a supplementary response.

11

NRC Regulatory Guide 1.144 (Continued):

- 12) With regard to Sections 3.4 and 4.2.1 of ANSI N45.2.12 - 1977 titled Audit Planning and Written Plan respectively: In the case of a monitoring audit provisions for "Written Plan" is met by the overall audit planning documents, which may include the audit plan. The audit plan is encompassed by the individual audit report (although may not be identified uniquely as audit plan). In the case of monitoring audits the written plan may appear in a different form.
- 13) Paragraph C.3.a of Regulatory Guide 1.144 (and Section 3.5.2 of ANSI N45.2.12 which it references) shall be implemented by meeting the audit requirements of the GGNS Technical Specifications for audits under C.3.a(1). Audits under C.3.a(2) are not covered by this OQAM.
- 14) Paragraph C.3.b(2) first sentence is replaced with the following:
Each Supplier is evaluated initially to determine the acceptability of his quality assurance program. If acceptable, the Supplier is placed on the Qualified Supplier List. Audits, when used as the selected method of source verification, should be conducted as follows:

Paragraph C.3.b(2), second paragraph is replaced with the following: An evaluation of the supplier should be performed annually. This evaluation must be formal, with the results documented and approved by responsible Supplier Quality Assurance management; and it must consider pertinent factors such as the results of other audits, history of performance of product and/or purchased service, and effectiveness of implementation of the Supplier's Quality Assurance program. This annual evaluation shall consider the complexity of the component concerned and the degree of quality and process control required by the manufacturing effort. As a result of the evaluation, Suppliers requiring a formal reaudit are identified. Regardless of the results of the evaluation, Suppliers shall be re-audited every three years.

Paragraph additions to C.3.b(2) are as follows: Previously evaluated and approved active suppliers, for which audit is not the selected method of source verification, should be evaluated concurrent with the award of a contract. Regardless of the results of the evaluation, active Suppliers (except those excluded under C.3.b(1) above) shall have been source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed.

Inactive Suppliers shall be evaluated prior to supplying safety-related items or services. An audit shall be conducted IF required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or one of the other methods allowable under 10CFR50, Appendix B, Criterion VII).

Paragraph addition to C.5 as follows: When another purchaser's audit is used without being designated "on behalf" of more than one purchaser, a copy of the results of the audit is obtained and reviewed for acceptability.

11

NRC Regulatory Guide 1.144 (Continued):

- 15) Paragraph C.4.a of Regulatory Guide 1.144 (and Section 3.5.3.3 of ANSI N45.2.12 which it references) shall be implemented with the clarification that the Director, Quality, the Manager, Quality or their designee shall determine which reorganizations or procedure revisions are "significant."
- 16) With regard to Section 5.1 of ANSI N45.2.12 - 1977 titled General: The licensee shall maintain records in accordance with and to meet the requirements of Policy 17.0 of the OQAM and ANSI N45.2.9 as specified in Appendix A.
- 17) With regard to Section 4.3.2 of ANSI N45.2.12 - 1977 titled Audit Process: Subsection 4.3.2.6 is modified as follows to account for the fact that immediate notification is not always possible: "Conditions requiring immediate corrective action (i.e., those which are so severe that any delay would be undesirable) shall be reported to management of the audited organization. Where responsible management personnel are available (such as at an operating nuclear power plant), these conditions shall be reported immediately. If responsible management personnel are not available (such as at a Supplier's shop on a back shift or for items discovered during a review of vendor supplied materials), these conditions shall be reported as soon as practical."

| 11

NRC Regulatory Guide 1.146 - "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants" (Rev. 0, 8/80) - Endorses ANSI N45.2.23 -1978.

The Operational Quality Assurance Program complies with the requirements of this Guide with the following clarifications:

- 1) With respect to Section 2.2 of ANSI N45.2.23 - 1978 titled Qualification of Auditors: Subsection 2.2.1 references an ANSI B45.2 (presumed to be N45.2); the Operational Quality Assurance Program does not include a commitment to this standard; therefore, the licensee will comply with an alternate subsection 2.2.1 which reads:
- Orientation to provide a working knowledge and understanding of the Operational Quality Assurance Program, including the ANSI standards and Regulatory Guides included in Appendix A of that Program, and the licensee's procedures for implementing audits and reporting results.
- 2) With respect to Section 4.1 of ANSI N45.2.23 - 1978 titled Organizational Responsibility: The licensee will comply with this Section with the substitution of the following sentence in place of the last sentence in the Section.

NRC Regulatory Guide 1.146 (Continued):

The Director, Quality; Manager, Quality Systems; the Manager, Quality or Lead Auditor shall, prior to commencing the audit, assign personnel who collectively have experience or training commensurate with the scope, complexity, or special nature of the activities to be audited. Self-initiated audits will be performed by qualified auditors, but no assignment is made "prior to commencing the audit" since it is self-initiated.

11

- 3) With respect to Section 3.2 of ANSI N45.2.23 - 1978 titled Maintenance of Proficiency: The licensee will comply with the requirements of this Section by defining "annual assessment" as one which takes place at least every twelve (12) months (to a maximum of fifteen [15]) and which uses either the initial date of certification or the last annual assessment date (not the calendar year) as the starting date for determining when such annual assessment is due.
- 4) With respect to Section 5.3 of ANSI N45.2.23 - 1978 titled Updating of Lead Auditors' Records: The licensee will substitute the following sentence for this Section:

Records for each Lead Auditor shall be maintained and updated during the period of the annual management assessment as defined in Section 3.2 (as clarified).
- 5) With respect to Section 5.4 of ANSI N45.2.23 - 1978 titled Record Retention: The licensee will substitute the following sentence for this Section.

Qualification records shall be retained as required by the Operational Quality Assurance Program.
- 6) With regard to Section 2.3.1.3 of ANSI N45.2.23 - 1978 titled Other Credentials of Professional Competence: Add "This includes RO (maximum of 1 credit) and SRO (maximum of 2 credits) licenses" to last sentence of this subsection.

APPENDIX B

DOCUMENT CONTROL RESPONSIBILITY FOR QUALITY-RELATED DOCUMENTS

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>		
A. Operational Quality Assurance Manual (Topical)	Quality Programs	Director, Quality (5)	Vice President, Engineering	Director, Quality	11	
		Director, Nuclear Support	Vice President, Operations GGNS			
		Director, Design Engineering GGNS	Vice President, Administrative Services & Regulatory Affairs			
		General Manager, Plant Operations	Vice President, Operations Support			
		Director, Plant Projects & Support				
		Director, Business Services				
		Director, Nuclear Safety and Regulatory Affairs	Senior Vice President, Planning & Assurance			11
		Director, Central Licensing				
		Manager, Quality				11
Director, Materials Purchasing & Contracts						

Rev. 11

Page 1 of 6

APPENDIX B

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>	
B.1. Quality Assurance Procedures	Quality Programs	Quality Programs	Director, Quality	Director, Quality	
2. Quality Assurance Instructions	Quality Programs	Quality Programs	Responsible Manager, Quality Programs	Manager, Quality Services	
3. Supplier Quality Assurance Procedures	Supplier Quality Assurance	Supplier Quality Assurance Director, Quality (5)	Manager, Quality	Manager, Quality	11
4. Non-site specific Quality Assurance Procedures	Services QA	Services QA Director, Quality (5)	Manager, Quality	Manager, Quality	
5. Services QA Procedures	Services QA	Services QA Director, Quality (5)	Manager, Quality	Manager, Quality	

C. Plant Staff and Plant Modification and Construction Procedures

1. This Section deleted in Revision 4

2. Administrative Procedures (Safety-Related)	Plant Staff and Plant Modification & Construction	General Manager, Plant Operations Manager, Plant Modification & Construction (9) Director, Quality (5) Plant Safety Review Committee (8)	General Manager, Plant Operations Manager, Plant Modification & Construction (10)	General Manager, Plant Operations	11
---	---	---	--	-----------------------------------	----

3. This section deleted in Revision 3.

APPENDIX B

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>
4. Plant Section Procedures	Plant Staff and Plant Modification & Construction	See Note (15) Assigned Reviewer See Note (3)	See Note (15)	See Note (15)
5. Plant Section Instructions	Plant Staff and Plant Modification & Construction	See Note (15) Assigned Reviewer (See Note 3)	See Note (15)	See Note (15)
D. This section deleted in Revision 4				
E.1. Entergy Operations Management Manual	Responsible Staff	Director, Quality (14) Responsible Director/Manager	Responsible Vice President	Administrative Services
2. Nuclear Support Administrative Procedures	Nuclear Support Staff	Section Manager Director, Quality (5)	Director, Nuclear Support General Manager, Plant Operations (11)	Director, Nuclear Support
a. Environmental Surveillance Program Section Procedures	Nuclear Support Staff	Manager, Environmental Services Assigned Reviewer See Note (3)	Director, Nuclear Support	Director, Nuclear Support
3. Nuclear Licensing Administrative Procedures	Nuclear Safety and Regulatory Affairs Staff	Director, Nuclear Safety and Regulatory Affairs Director, Quality (5)	Director, Nuclear Safety and Regulatory Affairs	Director, Nuclear Safety and Regulatory Affairs

11

Rev. 11

Page 3 of 6

APPENDIX B

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>	
4. Emergency Preparedness Administrative Procedures	Emergency Preparedness Staff	Assigned Reviewer Director, Quality (5)	General Manager, Plant Operations(12) Manager, Emergency Preparedness	Manager, Emergency Preparedness	11
F. Nuclear Plant Engineering Administrative Procedures	Nuclear Plant Engineering Staff	Nuclear Plant Engineering Principal Engineer or Senior Staff Engineer or Quality Engineer Director, Quality (5)	Director, Design Engineering GGNS	Director, Design Engineering GGNS	11
G. This section deleted in Revision 5.					
H. Q-List	Nuclear Plant Engineering Staff	Director, Design Engineering GGNS Manager, Fuel Fabrication (7) Director, Quality (5)	Director, Design Engineering GGNS	Director, Design Engineering GGNS	11
I. Administrative Services & Regulatory Affairs Administrative Procedures	Administrative Services & Regulatory Affairs Staff	Section Manager Director, Quality (5)	Responsible Director	Manager, Purchasing	11

Rev. 11

Page 4 of 6

APPENDIX B

	<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>	
J.	This section deleted in Revision 11.					11
K.	Central Licensing Administrative Procedures	Central Licensing Staff	Director, Central Licensing Director, Quality (5)	Director, Central Licensing	Director, Central Licensing	11
L.	Maintenance Support Administrative Procedures	Maintenance Support Staff	Director, Maintenance Support Director, Quality (5)	Director, Maintenance Support	Director, Maintenance Support	11
M.	Nuclear Engineering Analysis Administrative Procedures	Nuclear Engineering Analysis Staff	Director, Nuclear Engineering Analysis Director, Quality (5)	Director, Nuclear Engineering Analysis	Director, Nuclear Engineering Analysis	11

Rev. 11

Page 5 of 6

APPENDIX B

- NOTE:
- 1) Responsible individuals listed above may have designated alternates who are authorized to perform the function.
 - 2) Designated support organization (other licensee organizations, contractors, consultants, etc.) also be authorized to perform certain of the functions.
 - 3) See Paragraph 5.4.3 of this Manual.
 - 4) Sections 6.5.3, 6.5.4, 6.5.5, 6.5.6, 6.5.8, and 6.5.13 apply to this Appendix.
 - 5) The Director, Quality reviews these documents to assure quality requirements are addressed and provides concurrence. Concurrence indicated by the actual signature may be provided by any Manager QP, the Director, Quality, or designee.
 - 6) Review for comment not concurrence on matters relative to procurement.
 - 7) On matters relating to nuclear fuel and nuclear core design.
 - 8) As required by the Technical Specifications.
 - 9) For those procedures implemented by Plant Modification and Construction.
 - 10) Those procedures addressing responsibilities and authorities of the Plant Modification and Construction Section are approved by both the General Manager, Plant Operations and the Manager, Plant Modification & Construction.
 - 11) Environmental Surveillance Program Administrative Procedures Only.
 - 12) For those procedures directly interfacing with Plant Emergency Procedures.
 - 13) SRC Procedures Only.
 - 14) Safety Related Only.
 - 15) Plant section procedures/instructions are reviewed and approved in accordance with the guidelines as stated in Technical Specification section 6.5.3.1.

Rev. 11

Page 6 of 6

APPENDIX C
 OPERATIONAL QUALITY ASSURANCE
 PROGRAM IMPLEMENTING PROCEDURES

Implementing Document by Organization	10CFR50, Appendix B, Criteria																		Summary	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
A. <u>Quality Programs</u>																				
1. Operational QA Manual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	QA Manuals describe the licensee's QA Program Policies for all 10CFR50, Appendix B Criteria, and provide appropriate implementation procedures/instructions. (QA Procedures are numbered by Appendix B Criteria).	
2. QA Procedure Manual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
3. QA Instruction Manual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
B. <u>Nuclear Safety and Regulatory Affairs</u>																				11
Nuclear Licensing Administrative Procedures	X	X	X	X	X	X	X							X	X	X			Emphasis of Nuclear Licensing is on construction licenses and permits; safety analysis; fire protection; and, SRC support.	
C. <u>Nuclear Plant Engineering</u>																				11
NPE Administrative Procedures	X	X	X	X	X	X	X			X	X			X	X	X			Emphasis of Nuclear Plant Engineering is on design, independent review, evaluation and technical support.	

APPENDIX C

OPERATIONAL QUALITY ASSURANCE
PROGRAM IMPLEMENTING PROCEDURES

Implementing Document by Organization	10CFR50, Appendix B, Criteria																		Summary	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
<hr/>																				
D. <u>Plant Staff and Plant Modification & Construction</u>																				
Operations Manual																				
a. Safety Related Administrative Procedures	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	The Operations Manual contains implementing procedures for all 10CFR50, Appendix B Criteria.
<hr/>																				
E. <u>Emergency Preparedness</u>																				
Emergency Preparedness Administrative Procedures	X	X		X	X	X	X					X		X	X	X				Emphasis of Emergency Preparedness is on Readiness for Emergency Response.
<hr/>																				

APPENDIX C

OPERATIONAL QUALITY ASSURANCE
PROGRAM IMPLEMENTING PROCEDURES

Implementing Document by Organization	10CFR50, Appendix B, Criteria																	Summary	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18
<u>F. Administrative Services & Regulatory Affairs</u>																			
Administrative Services & Regulatory Affairs Administrative Procedures	X	X		X	X	X	X	X					X		X	X			Emphasis of Administrative Services & Regulatory Affairs is on procurement and administrative services.
<u>G. Nuclear Support</u>																			
Nuclear Support Administrative Procedures	X	X		X	X	X	X								X	X	X		Emphasis of Nuclear Support is on environmental licenses and permits.
<u>H. Supplier QA</u>																			
Supplier QA Procedures	X	X		X	X	X	X		X						X	X	X	X	Emphasis of Supplier QA is on supplier activities.
<u>I. Central Licensing</u>																			
Central Licensing Procedures	X	X	X	X	X	X	X								X	X	X		Emphasis of Central Licensing is on licensing activities.
<u>J. Maintenance Support</u>																			
Maintenance Support Procedures	X	X		X	X	X	X								X	X	X		Emphasis of Maintenance Support is on maintenance activities.

Rev. 11

APPENDIX C

OPERATIONAL QUALITY ASSURANCE
PROGRAM IMPLEMENTING PROCEDURES

Implementing Document by Organization	10CFR50, Appendix B, Criteria																		Summary
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
K. <u>Nuclear Engineering Analysis</u>																			
Nuclear Engineering Analysis Procedures	X	X	X	X	X	X	X	X	X						X	X	X		Emphasis of Nuclear Engineering Analysis is on engineering activities.

11

Rev. 11

Page 4 of 4