

INTRODUCTION

This manual describes the Operational Quality Assurance Program established by Mississippi Power & Light Company (MP&L) to assure that its 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-75/087).

The Quality Assurance Program described herein is applicable to all MP&L nuclear power plants which reference it in Section 17.2 of their Final Safety Analysis Report. The program applies to all operational phase activities (including pre-operational and startup testing) which affect the safety-related functions of those structures, systems and components which prevent or mitigate the consequences of postulated accidents which could cause undue risk to the health and safety of the public.

Revisions to this manual will be made as needed to reflect changes to MP&L's Operational Quality Assurance Program. Revisions which reflect programmatic changes (except those that are editorial in nature) will be submitted to the NRC prior to implementation of the changes. Organizational changes will be submitted to the NRC within 30 days after the effective date of the announced organizational changes.

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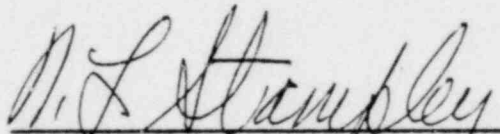
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FOREWORD

This manual prescribes the Operational Quality Assurance Program policies established by MP&L 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 Manager of Quality Assurance 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.



N. L. Stampley
Senior Vice President, Nuclear



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1.0 ORGANIZATION

1.1 PURPOSE

This policy describes the MP&L 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 MP&L 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 MP&L.

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1.3 ORGANIZATION AND RESPONSIBILITY

Clear and definitive lines of authority, responsibility and communication are established for all MP&L organizations involved in the Operational Quality Assurance Program. These lines extend from the highest management level through intermediate levels to and including the on-site operating organization and off-site organizational elements.

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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.

1.3.1 Senior Vice President, Nuclear

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Ultimate responsibility for the safe and reliable operation of the Grand Gulf Nuclear Station rests with the MP&L Senior Vice President, Nuclear. He reports to the President of the Company. The Senior Vice President, Nuclear, provides guidance and corporate quality assurance policies, goals and objectives to the Assistant Vice President, Nuclear Production and the Site Manager. He delegates authority and responsibility for the development, implementation and verification of the Quality Assurance Program to the appropriate MP&L organizations

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through the Assistant Vice President, Nuclear Production or the Site Manager, but maintains a continuing awareness of quality assurance matters and monitors effectiveness of the program through review of status reports prepared by the Manager of Quality Assurance, NRC Inspection Reports and management audits of the program. He is also responsible for coordination of corporate quality assurance matters, as they relate to procurement, with the Vice President & Chief Engineer.

1.3.2 Assistant Vice President, Nuclear Production

The Assistant Vice President, Nuclear Production reports directly to the Senior Vice President, Nuclear and is immediately responsible for establishing corporate quality assurance policies, goals and objectives for operations (excluding preoperational testing) and for the administration of all functions associated with the operation (excluding preoperational testing) of the Grand Gulf Nuclear Station, including those delegated to the Quality Assurance Organization. The Senior Vice President, Nuclear has delegated to the Assistant Vice President, Nuclear Production the authority and responsibility for the development, implementation and verification of the Quality Assurance Program for operations. He maintains a continuing involvement in quality assurance matters and assesses the scope, status, implementation and effectiveness of the program through review meetings, status reports prepared by the Manager of Quality Assurance, review of NRC Inspection Reports and management audits of the program. It is the Assistant Vice President, Nuclear Production's responsibility to assure that the requirements of the Operational Quality Assurance Program are implemented by the organizations under his direction.

1.3.3 Manager of Quality Assurance

The Manager of Quality Assurance reports directly to the Assistant Vice President, Nuclear Production and is delegated the overall authority and responsibility for establishing, controlling and verifying the implementation and adequacy of the Operational Quality Assurance Program (including preoperational and startup testing). He is assisted by a staff of quality assurance personnel in residence both in the General Office and at the plant site.

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

- 1.3.3.1 Developing and controlling the content of the Operational Quality Assurance Program and this manual,



- including the approval of changes thereto and providing interpretations thereof; | 2
- 1.3.3.2 Directing the activities of the General Office quality assurance staff, and the quality assurance staff located at the plant site, in verifying the implementation of the Operational Quality Assurance Program; | 2
- 1.3.3.3 Reporting to the Assistant Vice President, Nuclear Production (for operations phase, excluding preoperational testing) and the Site Manager (for preoperational testing) on the status and adequacy of the Quality Assurance Program; | 2
- 1.3.3.4 Reviewing and approving Operational Quality Assurance Procedures; | 2
- 1.3.3.5 Providing for review of and concurrence with Plant Quality Procedures, Instructions, and other documents as specified in Appendix B of this manual; | 2
- 1.3.3.6 Directing training for quality assurance personnel; providing training for the Plant Quality Superintendent and assuring by audit the training of his staff in the Operational Quality Assurance Program; and providing quality assurance input to the training and indoctrination programs for personnel performing quality-related activities; | 2
- 1.3.3.7 Maintaining adequate communications with regulatory agencies, suppliers, contractors and other MP&L organizations on Quality Assurance matters; | 2
- 1.3.3.8 Providing for working and quality interface and direct communication with the Plant Quality Superintendent; | 2
- 1.3.3.9 Planning and performing supplier evaluations, source inspection and audits; | 2
- 1.3.3.10 Developing and carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements; | 2
- 1.3.3.11 Providing for periodic review and analysis of NRC and MP&L Quality Assurance nonconformance documents to detect possible adverse quality trends. | 2

The Manager of Quality Assurance 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. He has the authority, 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.

The minimum qualification requirements for the position of the Manager of Quality Assurance are as described in ANSI/ANS 3.1 (Draft 12/79), Paragraph 4.4.5. See Appendix A.

1.3.4 Quality Assurance Operations Supervisor

The Quality Assurance Operations Supervisor reports to the Manager of Quality Assurance and is located at the plant site. He reviews Plant Quality Procedures and Instructions for the Manager of Quality Assurance; provides for working and quality interface and direct communication with the Plant Quality Superintendent; and directs the quality assurance staff located at the plant site in audits, monitoring and reviews of plant site activities — including the activities of the plant staff, the plant quality staff, the startup staff, and on-site contractors and consultants — to verify implementation of the Operational Quality Assurance Program at the plant site. He has the authority, 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.

1.3.5 Nuclear Plant Manager

The Nuclear Plant Manager reports to the Assistant Vice President, Nuclear Production 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; implements design changes and plant modifications and 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 the plant site, except for preoperational testing, and has the authority to stop work if an activity at the Plant is not in conformance with program requirements.



The Nuclear Plant Manager is assisted in carrying out his responsibilities by both the Assistant Nuclear Plant Manager and the Nuclear Support Manager as well as the operating plant staff — which includes individuals knowledgeable in plant radiation protection, quality assurance, training, and plant security. In addition, the Nuclear Plant Manager oversees the activities of the Plant Safety Review Committee and, as a member, provides for necessary liaison with the Safety Review Committee.

1.3.6 Plant Quality Superintendent

The Plant Quality Superintendent reports to the Nuclear Plant Manager and is responsible for assuring the implementation of the Operational Quality Assurance Program at the plant site, including preoperational and startup testing activities, by inspection and checking. He maintains a working and quality interface and direct communication with the Manager of Quality Assurance, the Site Manager and the Quality Assurance Operations Supervisor.

The Plant Quality Superintendent is responsible for developing and implementing Plant Quality Procedures and Instructions; for reviewing plant and preoperational and startup test procedures for compliance with quality requirements; for establishing a program of plant checking and inspection to verify conformance to quality requirements, including preoperational and startup testing activities; for supervising the plant quality staff; and for evaluating the status and effectiveness of the Quality Assurance Program at the plant site on a periodic basis and reporting his findings to the Nuclear Plant Manager, the Site Manager, and the Manager of Quality Assurance.

The Plant Quality Superintendent has the authority and organizational freedom to identify quality problems, provide or recommend solutions, and verify implementation of solutions. He has the authority, as delineated in the appropriate Plant Quality 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.

1.3.7 Manager, Nuclear Services

The Manager, Nuclear Services reports to the Assistant Vice President, Nuclear Production and is responsible for directing the activities of the Nuclear Services Staff. The Nuclear Services Staff is responsible for: securing the licenses and permits required to construct and operate the plant; management of the nuclear fuel cycle including the control of the



design activities associated with nuclear core design; and, maintenance of the general office nuclear records system. The Nuclear Services Staff also provides technical assistance and support in the areas of procurement; safety analysis; health physics; environmental protection; emergency planning; nuclear engineering, and fire protection. This staff provides support to the Assistant Vice President, Nuclear Production in matters related to administration, cost control, and Safety Review Committee activities. It is the responsibility of the Manager, Nuclear Services to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

1.3.8 Manager of Nuclear Plant Engineering

The Manager of Nuclear Plant Engineering reports to the Assistant Vice President, Nuclear Production and is responsible for directing the activities of the Nuclear Plant Engineering Staff. The Nuclear Plant Engineering Staff provides technical assistance and support in the areas of plant design, design review, modifications, chemical/environmental analysis, and operational analysis programs. It is the responsibility of the Manager of Nuclear Plant Engineering to assure that these functions are performed in accordance with the requirements of the Operational Quality Assurance Program.

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 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 for the applicable nuclear generating station.

1.3.11 Director of Purchasing & Stores

The Director of Purchasing & Stores reports to the Vice President & Chief Engineer who reports to the President of the Company. He is responsible for performing procurement activities as coordinated with the Nuclear Plant Manager and Manager, Nuclear Services and the Manager of Nuclear Plant Engineering.



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, MP&L shall retain responsibility for the delegated work.

1.3.13 Minimum Qualifications of Quality Assurance Personnel

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The qualification requirements and experience levels for key quality assurance 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 assurance personnel include the Manager of Quality Assurance, the QA Operations Supervisor, and the Plant Quality Superintendent.

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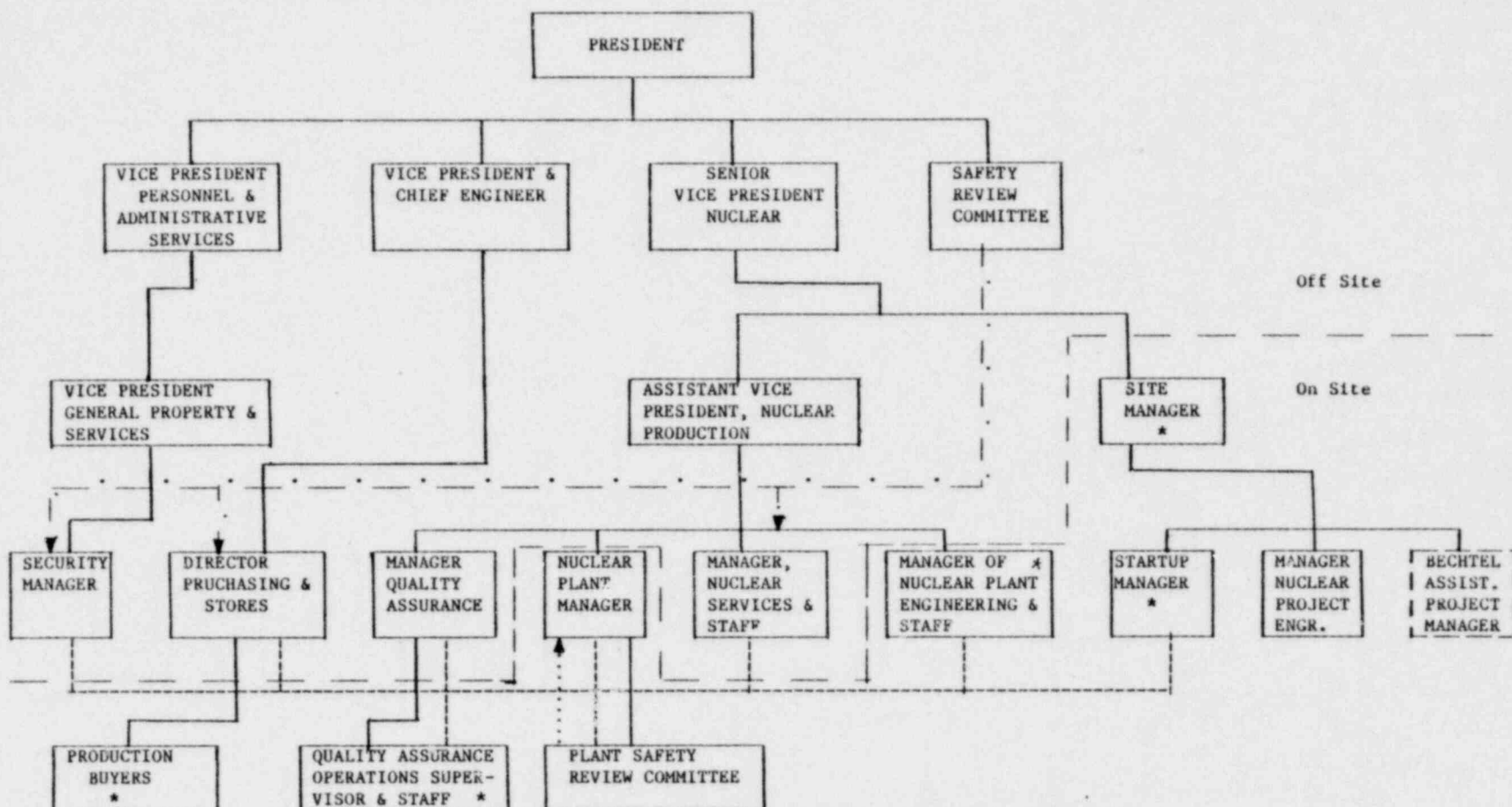
1.3.14 Director of Internal Auditing

The Director of Internal Auditing reports to the President of the Company. He is responsible for performing management audits of the Operational Quality Assurance Program.

1.3.15 Site Manager

The Site Manager reports directly to the Senior Vice President, Nuclear and is immediately responsible for establishing corporate quality assurance policies, goals, and objectives for preoperational tests, and for administration of all functions associated with the preoperational testing of the Grand Gulf Nuclear Station. The Senior Vice President, Nuclear has delegated to the Site Manager the authority and responsibility for the implementation of the Quality Assurance Program for preoperational testing. It is the Site Manager's responsibility to assure that the requirements of the Operational Quality Assurance Program are implemented by the organizations under his direction. The Site Manager maintains a continuing involvement in preoperational testing quality assurance matters and assesses the implementation and effectiveness of the program through contact with and reports furnished by the Manager of Quality Assurance.

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LEGEND

- REVIEW & MONITORING
- TECHNICAL & ADMINISTRATIVE AUTHORITY
- INDEPENDENT REVIEW
- WORKING INTERFACE & COMMUNICATION
- ON SITE/OFF SITE BOUNDARY LINE

MP&L ON-SITE AND OFF-SITE SAFETY REVIEW COMMITTEES'/
REVIEW & MONITORING FIGURE 17.2-2

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

2.0 QUALITY ASSURANCE PROGRAM

2.1 PURPOSE

This policy describes the Operational Quality Assurance Program established by MP&L 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 (including preoperational and start-up), auditing, operating, maintaining, repairing, refueling, and modifying. (Except major modifications which may be excepted and covered under an NRC accepted construction QA Program. See Appendix A.)

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2.4 POLICIES, GOALS AND OBJECTIVES

Corporate quality assurance policies, goals, and objectives are summarized in the statement that all individuals and organizations within MP&L who perform quality-related activities have personal and corporate 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 established by MP&L to assure that 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.



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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, procedures, and instructions. These documents convey MP&L quality assurance philosophy and requirements to all levels of management and to all organizations and individuals involved with program implementation.

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 items designated safety-related is included in the FSAR for the applicable nuclear generating station. A more definitive Q-List that delineates subcomponents, parts, etc. for items and services designated safety-related to which the program applies, is maintained and revised, as necessary, to reflect changes resulting from the finalization or modification of plant design. | 2

Nuclear Plant Engineering is responsible to maintain this Q-List in accordance with written procedures which will assure that items listed in the FSAR shall be in the definitive list, as a minimum. The distribution of 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. | 2

The applicable requirements of the program are also imposed upon contractors, suppliers and consultants. MP&L reviews and documents agreement with the Quality Assurance Program provisions of such organizations to the extent necessary to assure that the requirements will be implemented, and assigns trained qualified personnel to verify that functions delegated to these organizations are properly accomplished.

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 QA Program. | 2

2.5.1 Operational Quality Assurance Manual

The Operational Quality Assurance Manual consists of MP&L quality assurance policies, goals, and objectives and has been developed in accordance with applicable regulations, codes, and standards. It describes the Operational Quality Assurance



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Program and delineates the responsibilities and requirements imposed by the program for the performance of safety-related activities.

The Manager of Quality Assurance 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 made as needed to reflect changes to Quality Assurance Program requirements. Revisions that reflect programmatic changes (except those that are editorial in nature) will be submitted to the NRC prior to implementation of the changes. Organizational changes will be submitted to the NRC within 30 days after the effective date of announced organizational changes.

2.5.2 Implementing Procedures and Instructions

The Operational Quality Assurance Program is implemented through the use of written, approved 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 for the quality functions performed by the Quality Assurance Organization. Quality Assurance Procedures 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 Manager of Quality Assurance is responsible for approving Quality Assurance Procedures 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. Plant Administrative Procedures and Plant Quality Procedures/Instructions provide the means whereby quality-related activities at the plant site are controlled and documented to provide objective evidence of compliance with program requirements. The Nuclear Plant Manager reviews and approves all Plant Administrative Procedures. Nuclear Services Procedures provide the means for assuring that the quality-related activities of the Nuclear Services Organization are controlled and documented to provide objective evidence of compliance with program requirements. Nuclear Services Procedures are reviewed and approved by the Manager, Nuclear Services. Nuclear Plant Engineering Administrative Procedures provide for assuring

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that the quality-related activities of Nuclear Plant Engineering are controlled and documented to provide objective evidence of compliance with program requirements. Nuclear Plant Engineering Procedures are reviewed and approved by the Manager of Nuclear Plant Engineering. The GGNS Startup Manual contains procedures which provide for assuring that the quality-related activities of the Startup organization are controlled and documented to provide objective evidence of compliance with program requirements. The Startup Manual is reviewed and approved by the Startup Manager and Nuclear Plant Manager, for preoperational and startup testing, respectively. Required quality reviews and concurrence are performed by the Manager of Quality Assurance or the Plant Quality Superintendent, as described in Appendix B to this manual.

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 on-site and off-site 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;
- 2.5.3.2 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 is 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 Management Audits

The MP&L Internal Auditing Department, which is responsible to the President of the Company, performs management audits of Grand



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Gulf Nuclear Station activities, including the Operational Quality Assurance Program. The results of these audits are reported to responsible management of the audited organizations and the Manager of Quality Assurance.

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2.5.5 Resolution of Disputes

Disputes arising between MP&L organizations on any quality assurance matter which cannot be resolved by management of the involved organizations will be referred to the Senior Vice President, Nuclear for resolution.

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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 Preoperational Testing and Plant Turnover

The Site Manager, who is responsible for the administration of all construction and preoperational phase activities for the plant, provides the management interface with the principal contractors in planning and providing for preoperational testing and plant turnover. The Nuclear Plant Manager, who is responsible for the administration of all startup testing activities for the plant, provides the management interface with the principal contractors in planning and providing for startup testing and plant turnover. The Site Manager is responsible for the performance of preoperational testing, and the Nuclear Plant Manager is responsible for the performance of startup testing. Each is also responsible for plant turnover activities (i.e. turnover from construction testing to MP&L Startup, then turnover from MP&L Startup to MP&L Plant Staff) with support supplied by the principal contractors. Prior to the actual turnover, written procedures are developed by these organizations for the control of the transfer of all portions of the plant, including documentation.

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Procedures which address the preoperational, initial startup, and turnover phase of plant operations are contained in the GGNS Startup Manual.

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Appropriate Quality Assurance Procedures provide for auditing and appropriate Plant Quality Procedures provide for checking and inspection of preoperational testing, startup and plant turnover activities to verify conformance with Quality Assurance Program requirements.

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The Manager, Nuclear Services is responsible for the control of the turnover of construction records and documentation from contractors and suppliers.

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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.
- 2.5.8.2 Should - A recommendation, but not an enforceable requirement.
- 2.5.8.3 May - An option, neither a recommendation or a requirement.
- 2.5.8.4 Must - An internally auditable requirement imposed by MP&L management upon its employees, contractors, and agents - above and in excess of the legally binding requirements of the appropriate regulatory body. Such items are internally required but not externally enforceable.
- 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 shall be as defined in a contemporary collegiate dictionary by a well known publisher or authority.

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2.5.9 Quality Assurance Position Statements

Quality Assurance Position Statements are issued when considered necessary by the Manager of Quality Assurance, 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.

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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. If differences should arise during future reviews or implementation of the Program, they must be brought to the attention of the Manager of Quality Assurance; he will initiate 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 Manager of Quality Assurance has evaluated the issue and determined which requirement(s) must be modified.

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3.0 DESIGN CONTROL

3.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 (excluding nuclear fuel and nuclear core design - see 3.4.5) during the operational phase are delegated to the Manager of Nuclear Plant Engineering with the Nuclear Plant Manager implementing the design modification or change. The Manager of Nuclear Plant Engineering 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. 2

3.4.2 Proposed changes in the plant which involve a change to the Technical Specifications or an unreviewed safety question, as defined in 10CFR50.59, and written safety evaluations of changes in the plant as described in the Safety Analysis Report which are completed without prior NRC approval under the provisions of 10CFR50.59 are submitted to the Safety Review Committee for independent review. The Nuclear Plant Manager requests that a proposed change be made, the Manager of Nuclear Plant Engineering makes the design change, and the Manager, Nuclear Services performs the licensing review and assures submittal to the Safety Review Committee. 2

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 of Quality Assurance is responsible for reviewing off-site design documents for compliance with Operational Quality Assurance Program requirements and concurring with same; for monitoring the implementation of design control measures by off-site organizations; and for carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy. Those off-site design documents include the type design documents originated, reviewed and approved by MP&L off-site organizations (including Nuclear Plant Engineering).

3.4.5 Responsibility and authority for control of design activities related to modification of or changes to nuclear fuel or nuclear core design are delegated to the Manager of Nuclear Services. He manages and coordinates the activities of nuclear fuel suppliers and other appropriate organizations. Generally, the Manager of Nuclear Services is involved in: providing design inputs; providing interface control; and may perform design verification. The Manager of Nuclear Services is responsible for assuring that procedures are developed and implemented for the above design activities in accordance with the requirements of this policy.

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,



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hydraulic, radiation, and accident analyses; compatibility of materials; accessibility for inservice inspection, maintenance, and repair.

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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.

3.5.6 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.

| 2

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 on-site, 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.
- 3.5.13 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. 2
- 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 Manager of Nuclear Plant Engineering and/or the Nuclear Plant Manager in accordance with Policy 17.0 of this manual. 2
- 3.5.16 Design records relating to nuclear fuel and core design shall be maintained by the Manager of Nuclear Services in accordance with Policy 17 of this manual. 2
- 3.5.17 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. 2
- 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; MP&L 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 and 7 and ANSI N45.2.13 (as modified and included in Appendix A of the OQAM); 2
 - 3.5.18.2 They shall be in accordance with the QA 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 QA Program shall be reviewed by MP&L Quality Assurance to assure that any additional requirements which are considered necessary to assure quality have been included.

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4.0 PROCUREMENT DOCUMENT CONTROL

4.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 MP&L 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 (i.e. Nuclear Procurement Procedures as listed in Appendix B of this Manual). In either case procurement document control procedures which address the requirements of this policy, applicable to their scope of activities, shall be implemented. 2

4.4.2 The Nuclear Plant Manager is responsible for on-site 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. 2

4.4.3 The Plant Quality Superintendent is responsible for performing quality reviews of procurement documents generated by on-site organizations, prior to issuance, to verify conformance to the requirements of this policy. He is responsible for reviewing Plant Administrative Procedures for procurement document control to assure that they address the applicable requirements of this policy unless an approved generic procedure is used. He is responsible for performing quality reviews of procurement documents prior to issuance to verify conformance to the requirements of this 2



- policy. Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. | 2
- 4.4.4 The Manager, Nuclear Services is delegated the responsibility for assuring that general office procurement activities performed by the Nuclear Services Staff are procedurally controlled in accordance with the requirements of this policy. This includes preparation, review, approval and issuance of procurement documents. | 2
- 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 surveillance or audits, that the requirements are being adequately implemented. | 2
- 4.4.6 The Manager of Quality Assurance is responsible for assuring implementation of procurement document control measures of off-site organizations, and for quality review of procurement documents and procedures generated by off-site organizations. He is also responsible for carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy. | 2
- 4.4.7 The Director of Purchasing & Stores is responsible for performing procurement activities as coordinated with the Manager, Nuclear Services, the Manager of Nuclear Plant Engineering, and the Nuclear Plant Manager and as delineated in appropriate procedures. | 2
- 4.4.8 The Manager of Nuclear Plant Engineering 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. | 2
- 4.4.9 The Site Manager is responsible for assuring procurement activities performed by the Startup Staff are procedurally controlled in accordance with the requirements of this policy. This includes preparation, review, approval, and issue of procurement documents. | 2



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.
- 4.5.2 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 MP&L 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 MP&L prior to use or installation of the procured item;

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- 4.5.2.8 MP&L's right of access to the supplier's facilities and records for inspection and audits, as deemed necessary;
- 4.5.2.9 Extension of applicable requirements to lower tier subcontractors and suppliers, including MP&L's right of access to facilities and records;
- 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; 2
- 4.5.2.11 MP&L'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 codes, taxes, format or editorial changes that do not affect the quality of the item or service. 2
- 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. 2



5.0 INSTRUCTIONS, PROCEDURES AND DRAWINGS

5.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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.

| 2

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 and 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 documented instructions, procedures or drawings. It is the responsibility of the managers of these organizations to assure the development, review, approval and control of instructions, procedures and drawings necessary to control their safety-related activities in accordance with the requirements of this manual.

5.4.2 Requirements for contractors and suppliers to have documented instructions, procedures or drawings are specified in the applicable procurement documents, as prescribed in Policy 4.0 of this manual.

| 2

5.4.3 Except for preoperational testing where the the Site Manager is responsible for these activities, the Nuclear Plant Manager is responsible for assuring that adequate inspection plans; test, calibration, special process, maintenance, modification and repair procedures; drawings and specifications; and other safety-related documents, and the revisions thereto, are used. The Plant Quality Superintendent is responsible for the quality review of these documents, to the extent necessary to verify conformance to the requirements of this manual. Documents which contain administrative controls which specify

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quality assurance requirements will be reviewed by the Plant Quality Superintendent. Lower tier documents 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. | 2

- 5.4.4 The Manager of Quality Assurance is 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 Quality Assurance Program requirements, including the requirements of this policy. | 2

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. | 2
- 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. | 2
- 5.5.3 Instructions, procedures or drawings shall include quantitative and/or qualitative acceptance criteria for verifying that the activities have been satisfactorily accomplished. | 2
- 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.
- 5.5.5 Safety-related Plant Administrative Procedures shall 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 90 days. If procedures cannot be revised or issued within 90 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. | 2



6.0 DOCUMENT CONTROL

6.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 3 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. | 2

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 The Plant Quality Superintendent is responsible for assuring implementation of document control activities at the plant site to verify conformance to the requirement of this policy by inspection or checking. | 2

6.4.4 The Manager of Quality Assurance is responsible for monitoring the document control activities of off-site organizations and for carrying out an audit program, as described in Policy 18.0 of this manual, to verify compliance with Quality Assurance Program requirements, including the requirements of this policy.



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 documents are described in Appendix B to this manual.

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

Final Safety Analysis Report

Design Change Requests

Design Change Notices

Nonconformance Reports

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 person 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 A master list or equivalent shall be established and maintained to identify the current revision number of instructions, procedures, specifications, drawings and procurement documents. This list shall be distributed to predetermined, responsible personnel to preclude the use of superseded documents.

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. Obsolete 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. Approved changes shall be included in the documents prior to implementation of the change, except in those cases where adequate procedural controls allow implementation of approved changes prior to revision of the original document. These approved changes, if considered permanent, shall be incorporated into the original document within 30 days.

Prior to issuance of an operating license, approved changes (Temporary Change Notices) will be incorporated in the next revision of the affected procedure or within six months, whichever occurs first.

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6.5.9 In addition to initial review and approval, procedures for operational phase activities shall be subject to subsequent periodic reviews with a specified frequency dependent on the type and complexity of the activity involved.

6.5.10 All procedures shall be reviewed, by an individual knowledgeable in the area affected, no less frequently than every two years, to determine if changes are necessary or desirable. A complete revision of the procedure may be interpreted to constitute a procedure review. This commitment does not go into effect until an operating license is issued for Unit 1.

2



- 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.
- 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 established by MP&L 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 Manager, Nuclear Services, the Manager of Quality Assurance, the Nuclear Plant Manager (for startup testing and operations), the Manager of Nuclear Plant Engineering and the Site Manager (for preoperational testing). 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 inspection; audit; and/or examination of items upon delivery. 2

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. 2

7.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring implementation of procurement activities at the plant site. He is responsible for checking or 2



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inspection as necessary to assure compliance with the requirements of this policy.

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- 7.4.4 The Manager of Quality Assurance is responsible for the implementation of Quality Assurance Program requirements relative to off-site procurement activities, including: the quality evaluation of suppliers; source inspections; and an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy.

2

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 and audit at the source, and/or examination of items upon delivery.

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- 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 their capability to comply with applicable Quality Assurance Program requirements, and to provide items or services in accordance with the requirements of the procurement documents;

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7.5.2.2 Review and evaluation of historical quality performance data;

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7.5.2.3 Source qualification programs;

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7.5.2.4 Source quality surveys;

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7.5.2.5 Through the Coordinating Agency for Supplier Evaluation (CASE) using the current revision of the CASE Register. When the CASE Register is used for commercial (catalog and off-the-shelf) items, reference to the CASE Register shall provide adequate documentary evidence of source evaluation. Commercial items are those that do not require unique design or special engineering specifications; or are manufactured to national standards or by processes generally automated or highly repetitive; or there is little chance for

2



error during manufacture to affect their safety-related characteristics. For items which are not commercial or which require unique design or special engineering specifications, a copy of the qualifying audit report shall be obtained and reviewed for adequacy and applicability prior to selection;

- 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; | 2
- 7.5.2.7 Through documented information received from others (architect-engineer, NSSS supplier, other utilities, ASME, etc.) indicating a program meeting appropriate Quality Assurance Program requirements. | 2

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

To facilitate pre-award supplier evaluation, telephone surveys may be conducted by Quality Assurance as established by Quality Assurance Procedures. Other means of supplier pre-award evaluation are also established by Quality Assurance Procedures. | 2

- 7.5.3 When program evaluation is the method used to determine acceptability, contractor or supplier Quality Assurance Programs shall be evaluated and concurred with in accordance with written procedures by qualified quality assurance personnel prior to initiation of activities affected by the program. |

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 put in service until after the item is shown to meet procurement requirements (including QA Program). Specific exceptions shall be allowed for those instances where changing regulatory requirements necessitate retrofit for purchased and installed items not purchased under a Quality Assurance Program. | 2

- 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 | 2



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 inspections or audits, as necessary, to assure the quality of the item and to verify supplier conformance to procurement document requirements. | 2
- 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. Audits shall be performed in accordance with procedures which implement the requirements of Policy 18.0 of this manual. | 2
- 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 inspections and audits 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. | 2
- 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 the plant site 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. | 2

Prior to issuance of an Operating License (OL), Startup may install equipment or parts for which all documentation has not yet been received at the plant site: such installation and use will be on a "risk basis" such that a failure to subsequently receive all of the required documentation may require the equipment or parts to be removed and may invalidate any testing which has been accomplished. Startup may operate such installed equipment, but they may not rely on the affected systems to fulfill their safety-related function. Controls in Startup and Plant Quality Procedures will cover this conditional release process, and will assure that the applicable procedural and administrative aspects of this policy (7.5.8) and Policies 8.5.8 and 14.5.5 of the Operational Quality Assurance Program are fulfilled. | 2



- 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 plant personnel specifically designated to perform this activity. These personnel will be designated by the Plant Quality Superintendent. | 2
- 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 program, such documentation shall include a description of those non-conformances dispositioned "accept as is" or "repair." | 2
- 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. | 2
- 7.5.12 Spare or replacement parts for safety-related systems or components shall be procured, fabricated and controlled in accordance with present QA 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. | 2
- 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. | 2



8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS AND COMPONENTS

8.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 and control of materials, parts and components during the operational phase are delegated to the Nuclear Plant Manager. He is 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. | 2

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. | 2

8.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring implementation of identification and control requirements for items at the plant site by inspection or checking. He is responsible for reviewing procedures and performing checking or inspection activities to the extent necessary to verify conformance to the applicable requirements of this policy. | 2



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- 8.4.4 The Manager of Quality Assurance has 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 Quality Assurance Program, including the requirements of this policy.

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. 7
- 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. | 2
- 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). | 2
- 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. | 2
- 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.
- 8.5.8 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 which prevent use or operation of items



until verification and documentation is available. The Plant Quality Superintendent shall review and concur with conditional releases.

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9.0 CONTROL OF SPECIAL PROCESSES

9.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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. | 2

9.3 APPLICABILITY

The requirements of this policy apply to all individuals or organizations performing special processes, either on-site or off-site, during the operational phase of nuclear power plant activities.

9.4 RESPONSIBILITY

9.4.1 Responsibility and authority for the control of special processes at the plant site during the operational phase are delegated to the Nuclear Plant Manager. He is responsible for assuring that special processes are performed in accordance with procedures and instructions which implement the requirements of this policy. He is also responsible for assuring that contractors who are delegated responsibilities for the on-site performance of special processes, impose the applicable requirements of this policy on their internal operations and on their contractors and suppliers. | 2

9.4.2 Off-site 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.

9.4.3 The Plant Quality Superintendent is delegated the responsibility for checking or inspection of the control of special processes at the plant site. He is responsible for reviewing Plant Administrative Procedures controlling special processes, and for checking or inspection of special process activities to the extent necessary to verify conformance to the requirements of this policy. Lower tier instructions may be reviewed by individuals (other than the preparer) of the organization preparing the documents, if such individuals | 2



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have been indoctrinated in the Operational Quality Assurance program. The Plant Quality Superintendent is responsible for indoctrination and certification of these individuals.

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- 9.4.4 The Manager of Quality Assurance has the responsibility for monitoring the special process control measures of off-site 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 Quality Assurance Program, including the requirements of this policy.

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.

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10.0 INSPECTION

10.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 the plant site during the operational phase are delegated to the Nuclear Plant Manager. He is responsible for assuring that procedures/instructions developed for the performance of work operations include appropriate inspection requirements. It is also his responsibility to assure that inspections, examinations, measurements and tests of materials, products or activities are performed and documented for each work operation where necessary to assure quality. | 2

10.4.2 The Plant Quality Superintendent is delegated the responsibility for assuring that the on-site inspection program is carried out in accordance with the requirements of this policy. He is responsible for reviewing Plant Administrative Procedures which control work instructions, modification and repair instructions; preoperational and startup test procedures; and other documents to assure that they contain the appropriate inspection requirements. Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. The Plant Quality Superintendent is also responsible for developing and implementing procedures for the performance of quality inspections of plant site activities including those | 2
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activities of MP&L Startup. All quality inspectors shall be qualified by the Plant Quality Superintendent. All safety-related work authorizations will be reviewed by the Plant Quality Superintendent for determination of any quality inspection requirements.

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10.4.3 MP&L may delegate the responsibility for implementing certain portions of the inspection program to other organizations. However, MP&L retains the ultimate responsibility for assuring that all aspects of the inspection program are carried out. At the plant site, the Plant Quality Superintendent is responsible for assuring that inspection activities assigned to outside organizations are accomplished in accordance with the requirements of this policy.

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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.

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10.4.5 The Manager of Quality Assurance is responsible for qualification of source inspectors and has 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 Quality Assurance Program, including the requirements of this policy.

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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:

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10.5.3.1 Identification of characteristics and activities to be inspected;



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- 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.
- 2
- 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 of operating activities (work functions associated with normal operation of the plant, routine maintenance, and certain technical services routinely assigned to the on-site operating organization) may be conducted by second-line 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 the Quality Assurance or Plant Quality organization prior to initiating the inspection.
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- 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 checking processing methods, equipment, and personnel. Inspection and process checking shall be utilized if control is inadequate without both. | 2
- 10.5.9 Plant 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. Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. | 2
- 10.5.10 Modifications, repairs and replacements shall be inspected in accordance with the original design and inspection requirements or documented engineering approved alternatives.
- 10.5.11 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.



11.0 TEST CONTROL

11.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 Except for preoperational testing where these activities are the responsibility of the Site Manager, responsibility and authority for the development and implementation of testing programs during the operational phase are delegated to the Nuclear Plant Manager. 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 on-site 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 off-site 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 The Safety Review Committee is responsible for performing independent reviews of proposed tests or experiments or written safety evaluations of tests and experiments which fall within the scope of 10CFR50.59.

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11.4.4 The Plant Quality Superintendent is delegated the responsibility for assuring implementation of test activities at the plant site by inspection or checking. He is responsible for reviewing test programs and Plant Administrative Procedures which control testing and for performing inspection or checking activities necessary to verify conformance to the requirements of this policy. Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. | 2

11.4.5 The Manager of Quality Assurance has 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 Quality Assurance Program, including the requirements of this policy. | 2

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. | 2

11.5.3 Testing during the preoperational period shall be sufficient to demonstrate the capability of structures, systems and components to meet safety-related performance requirements.

11.5.4 Testing during the initial operational period shall be sufficient to confirm the design bases. | 2

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.
- 11.5.7 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 Mandatory hold points for witness 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 established by MP&L 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 the plant site during the operational phase are delegated to the Nuclear Plant Manager. He is responsible for assuring that procedures are developed to implement the requirements of this policy. | 2

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. | 2

12.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring by inspection or checking the control of measuring and test equipment at the plant site. He is responsible for reviewing Plant Administrative Procedures which govern equipment control instructions and for performing inspection or checking activities necessary to verify conformance to the requirements of this policy. Lower tier | 2



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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals.

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- 12.4.4 The Manager of Quality Assurance has 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 Quality Assurance Program, including the requirements of this policy.

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



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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.

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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.

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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.

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.

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 established by MP&L 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 Except for preoperational testing where these activities are the responsibility of the Site Manager, the responsibility and authority for control of handling, storage and shipping, including cleaning and preservation, at the plant site during the operational phase are delegated to the Nuclear Plant Manager. He is 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. | 2
- 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. | 2
- 13.4.3 The Plant Quality Superintendent is delegated the responsibility for checking or inspection of the control of handling, storage and shipping at the plant site including during preoperational and Startup testing. He is responsible for reviewing Plant Administrative Procedures and performing checking or inspection activities to the extent | 2



necessary to verify conformance to the applicable requirements of this policy. Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals.

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- 13.4.4 The Manager of Quality Assurance has the responsibility for carrying out an audit program, as described in Policy 18 J of this manual, to verify conformance with the requirements of the Quality Assurance Program, including the requirements of this policy.

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 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 MP&L engineering personnel for the prevention of damage, deterioration or loss prior to installation or use. Surveillance 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.
- 13.5.4 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.



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- 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.



14.0 INSPECTION, TEST AND OPERATING STATUS

14.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 Except for preoperational testing where these activities are the responsibility of the Site Manager, responsibility and authority for identifying and controlling the inspection, test and operating status of safety-related items during the operational phase are delegated to the Nuclear Plant Manager. He is responsible for assuring that procedures are developed and implemented to address the applicable requirements of this policy. | 2

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. | 2

14.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring implementation of identification and control of inspection, test and operating status for safety-related items by inspection or checking. He is responsible for reviewing Plant Administrative Procedures and performing checking of inspection activities necessary to verify conformance to the applicable requirements of this policy. | 2



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Lower tier 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 Plant Quality Superintendent is responsible for indoctrination and certification of these individuals.

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- 14.4.4 The Manager of Quality Assurance has the responsibility for carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy.

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 by engineering procedures with concurrence by the appropriate quality organization. Plant Quality will provide the required concurrence for Plant Site activities and Quality Assurance will provide concurrence for MP&L off-site Design induced "bypasses." 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.

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- 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

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considered to be inoperable and reliance shall not be placed on such systems 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.
- 14.5.7 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 established by MP&L to 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 control of nonconforming safety-related items, services or activities in order to assure that the nonconforming conditions do not compromise quality or safety.

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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 control of nonconforming items, services and activities during the operational phase are delegated to the Site Manager (for preoperational testing), Nuclear Plant Manager, Manager of Nuclear Plant Engineering, the Manager of Quality Assurance, 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.

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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.

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15.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring implementation of the control of nonconforming items, services and activities by inspection or checking plant site operations phase activities, including

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preoperational and startup testing. He is responsible for performing checking or inspection activities to the extent necessary to verify conformance to the applicable requirements of this policy. He is also responsible for the periodic review and analysis of nonconformance reports initiated under the Plant Quality nonconformance system to detect possible adverse quality trends.

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- 15.4.4 The Manager of Quality Assurance has 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 Quality Assurance Program, including the requirements of this policy. He is also responsible for the periodic review and analysis of NRC and MP&L Quality Assurance nonconformance documents to detect possible adverse quality trends.

15.5 REQUIREMENTS

- 15.5.1 Procedures shall be established by the responsible organizations to control nonconforming safety-related 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 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, and shall 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. 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 _____ of appropriate

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documentation. Marking 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; 12
- 15.5.5.2 Scrap; 12
- 15.5.5.3 Rework to conform to a drawing or specification; 12
- 15.5.5.4 Repair in accordance with an engineering approved procedure. 12

Items received without the necessary documentation, must be considered nonconforming. If the only inadequacy was with documentation, and acceptable documentation is subsequently received, then the item is no longer considered nonconforming. 2

15.5.6 The acceptability of rework shall be verified by reinspection 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.

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 established by MP&L 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 Nuclear Plant Manager, Manager of Nuclear Plant Engineering, Manager of Nuclear Services, Site Manager, and the Manager of Quality Assurance. 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 is implemented and is adequate to prevent recurrence of significant adverse conditions. 2

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. The Nuclear Plant Manager is responsible for the determination and implementation of corrective action on-site during operations phase activities (except for preoperational testing when the Site Manager is responsible). 12 2



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- 16.4.3 The Plant Quality Superintendent is responsible for performing reviews of nonconformance reports initiated under the Plant Quality nonconformance system to identify possible adverse quality trends and for reporting such trends, if any, to the Site Manager, Nuclear Plant Manager and the Manager of Quality Assurance for further action. | 2
- 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. | 2
- 16.4.5 The Manager of Quality Assurance has the responsibility for carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy. | 2

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, abnormal occurrences, violations, deviations, reportable events, 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.
- 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.



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- 16.5.6 For significant conditions adverse to quality or safety, the cause of the conditions, and the corrective action taken shall be documented and reported to appropriate levels of management for review. Violations, deviations, reportable events, and 10CFR21 items which require reporting to the NRC, shall also be submitted to the Safety Review Committee for their review along with the results of any investigations made and the recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event. | 2
- 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. | 2



17.0 QUALITY ASSURANCE RECORDS

17.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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 Assistant Vice President, Nuclear Production. 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 Nuclear Plant Manager and the Manager, Nuclear Services. | 2

17.4.2 The Nuclear Plant Manager is responsible for the collection, storage and maintenance of records generated on-site and required to be maintained at the site including CGNS records generated by the Nuclear Plant Engineering Staff and Startup Staff. 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, Nuclear Plant Engineering Administrative Procedures or the Startup Manual developed to meet the requirements of this policy. | 2



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- 17.4.3 The Plant Quality Superintendent is delegated the responsibility for assuring, by inspection or checking, implementation of the collection, storage, and maintenance of those quality assurance records on-site which are under the control of the Nuclear Plant Manager. He is responsible for reviewing Plant Administrative procedures and performing checking activities to the extent necessary to verify conformance to the requirements of this policy. Lower tier instructions may be reviewed by individuals (other than preparer) of the organization preparing the documents if such individuals have been indoctrinated in the Operational Quality Assurance Program. The Plant Quality Superintendent is responsible for indoctrination and certification of these individuals. | 2
- 17.4.4 The Manager, Nuclear Services is responsible for the collection, storage and maintenance of records generated by the Nuclear Services Staff, Nuclear Plant Engineering Staff, and those records transmitted to the Manager, Nuclear Services. This includes quality assurance records generated by Quality Assurance. Records to be maintained by the Manager, Nuclear Services shall be identified in the appropriate Nuclear Services and Nuclear Plant Engineering Administrative Procedures developed to meet the requirements of this policy. | 2
- 17.4.5 The Manager of Quality Assurance is responsible for the collection and storage of quality assurance records generated by Quality Assurance until such time as they are transmitted to the Manager, Nuclear Services. Such records shall be identified in the appropriate Quality Assurance Procedures developed to meet the requirements of this policy. | 2
- 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. | 2
- 17.4.7 The Manager of Quality Assurance has the responsibility for carrying out an audit program, as described in Policy 18.0 of this manual, to verify conformance with Quality Assurance Program requirements, including the requirements of this policy.



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. | 2
- 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; | 2
- 17.5.3.2 Evidence of completing and verifying a manufacturing, inspection, or test operation; | 2
- 17.5.3.3 The date and results of the inspection or test; | 2
- 17.5.3.4 Information related to conditions adverse to quality; | 2
- 17.5.3.5 Inspector or data recorder identification; | 2
- 17.5.3.6 Evidence as to the acceptability of the results. | 2
- 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 records shall be stored in a separate remote location. | 2
- 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, and material analyses; monitoring of work performance; personnel, procedures, and equipment qualification



records; nonconformance reports; corrective action documents; and 10CFR evaluations (i.e. 10CFR50.59, 10CFR21, etc.).

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18.0 AUDITS

18.1 PURPOSE

This policy describes the Operational Quality Assurance Program measures established by MP&L 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. | 2

18.3 APPLICABILITY

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

18.4 RESPONSIBILITY

18.4.1 Responsibility and authority for the MP&L audit program are delegated to the Manager of Quality Assurance. He is 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. He is responsible for assuring that procedures are developed, in accordance with the requirements of this policy, to provide for both internal and external audits. He is responsible for performance of audits to verify plant conformance to the Technical Specifications; audits of operational phase activities (including activities of the Plant Quality Organization and Startup Organization); and audits of contractors and suppliers performing on-site and off-site activities. He shall also assure that audit results are documented and reported to appropriate management, and that prompt corrective action is taken to eliminate nonconformances detected during the course of audits. | 2

18.4.2 The Safety Review Committee is responsible for independently reviewing the written reports of all audits of operating plant activities. The Plant Safety Review Committee also reviews such audit reports.

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 | 2



the Quality Assurance Program requirements specified in the procurement documents.

- 18.4.4 The MP&L Internal Auditing Department is responsible to the President of the Company for performing management audits of the Operational Quality Assurance Program. Such audits are performed annually.

18.5 REQUIREMENTS

- 18.5.1 A comprehensive program of planned and documented audits shall be established and implemented by the Quality Assurance Organization to verify compliance with all aspects of the Quality Assurance Program. The audit program shall be carried out in accordance with written approved procedures which address the requirements of this policy.
- 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 MP&L 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. | 2
- 18.5.3 Audits shall include an objective evaluation of quality-related policies, procedures and instructions and the effectiveness of their implementation; quality-related activities and processes; safety-related items; work areas; and documentation 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. | 2
- 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: | 2



- 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; | 2
- 18.5.6.2 Audits shall be scheduled on the basis of the status and importance of the activities to be audited; | 2
- 18.5.6.3 Those specified in the Technical Specifications for the applicable nuclear generating station. | 2
- 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 MP&L has provided a clarification. See Appendix A. | 2
- 18.5.8 Audit results, including nonconformances detected during the audit, shall be documented and reviewed with the supervisor or manager having responsibility in the areas audited. Distribution of audit reports and verified corrective actions shall include management of the audited organization, appropriate MP&L management, the Safety Review Committee, and Plant Safety Review Committee for audits of Plant operations. | 2
- 18.5.9 Management of the audited organizations shall be responsible for correcting nonconformances identified during the audit. They shall assure that corrective action is scheduled, accomplished as scheduled, and documented in a followup response. The corrective action shall be adequate to prevent the recurrence of significant conditions adverse to quality. | 2
- 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 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.



APPENDIX A

Conformance of MP&L Operational Quality Assurance Program to NRC Regulatory Guides and ANSI Standards

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In each of the ANSI standards, other documents (i.e. other standards, codes, regulations 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 QA Program, including appendices, or such documents are not considered as Quality Assurance Program requirements, although they may be used as guidance.

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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 the Quality Assurance organization (both on-site and off-site) with the following clarification:

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- 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: MP&L 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.

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The applicability of this guide/standard to other personnel in the MP&L 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:

MP&L may choose not to use the specific A, B, C and D level classification system set forth in this guide. MP&L 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 MP&L "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, MP&L shall either control these activities under this Operational QA Program or under an NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA 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

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

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, MP&L shall either control these activities under this Operational QA Program or under an NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA program-matic/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 MP&L's 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 QA 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 QA 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 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 MP&L; (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 QA 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 MP&L 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 QA 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 MP&L'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 QA 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 QA 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. MP&L 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, 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 QA 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 clarification:

- 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 QA 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 Guide's changing of the two uses of the word "should" in this sentence to "shall" unnecessarily restricts MP&L'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.
- 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 QA 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 MP&L'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 - 1976 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 QA Program or in Technical Specifications or are otherwise part of the license of the individual nuclear facility. MP&L'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 QA 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 MP&L 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 QA 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 QA Program. The MP&L 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 QA Program, the requirements of the individual nuclear facility Technical Specifications, and Policies 16 and 18 of the Operational QA Program.
- 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 Specification requirements of the individual nuclear facility.
- 12) With regards to Section 4.5 of ANSI N18.7 - 1976 titled Audit Program: The MP&L 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 QA 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"; MP&L has submitted Appendix C to the Operational QA 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, MP&L 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, Support and Services Superintendent, Assistant Plant Manager, or Plant Manager) knowledgeable in the areas affected by the change, may approve changes which require the signer to hold an SRO license.
- 15) With respect to Section 5.2.6 of ANSI N18.7 - 1976 titled Equipment Control: MP&L will comply with the "independent verification" requirements based on the definition of this phrase as given under our commitment to Regulatory Guide 1.74.

Since MP&L 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, MP&L 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, MP&L 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."

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For those system run-in activities that take place prior to issuance of an Operating License, the Startup Engineer may direct work by MP&L 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: MP&L 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, MP&L 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."
- 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 MP&L's commitments to ANSI N45.2.3 and N45.2.1 as set forth in Appendix A to the Operational QA 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 event.

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- 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. | 2
- 24) With regard to Section 5.3.9 of ANSI N18.7 - 1976 titled Emergency Procedures: As directed by the NRC, MP&L 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 MP&L will have these "symptom" based procedures, "event" based procedures will not normally be provided. | 2
- 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, MP&L will interpret item (11) to mean the natural occurrences which have been evaluated in the FSAR for the individual nuclear facility. | 2
- 26) With regard to Section 5.3.9.3 of ANSI N18.7 - 1976 titled Procedures for Implementing Emergency Plan: MP&L's NRC accepted Emergency Plan for each nuclear facility will be implemented in lieu of the requirements in this Section. | 2

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 clarification: | 2

- 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 polyethylene), 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 1.38 - "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 clarification:

- 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 MP&L'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 QA 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 QA 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 QA 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: MP&L 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)), MP&L may choose a storage atmosphere which is free of harmful contaminants in concentrations that could produce damage to stored items. Similarly (for Item (7)) MP&L 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.
- 7) With regard to Section 3.3 of ANSI N45.2.2 - 1972 titled Cleaning: (Third sentence) MP&L 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) MP&L 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. 2
 - 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 MP&L position. 2
 - 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. 2
 - 11) With regard to Section 3.7.2 of ANSI N45.2.2 - 1972 titled Crates and Skids: Skids or runners will be used on containers with a gross weight of 100 lbs. or more. Skids or runners will normally be fabricated from 4 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. 2
 - 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. MP&L will assure adequate protection from weather or other environmental conditions by a combination of vehicle enclosure and item packaging. 2
 - 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: MP&L will comply with the requirements of these Sections subject to the clarifications taken to other Sections which are referenced therein. 2
 - 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 QA Program. The person performing the visual scrutiny during unloading is not considered to be 2

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. MP&L 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, weathertight, 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 shelving or shelves to permit air circulation. The building shall be provided with heating and temperature control or its equivalent to reduce condensation and corrosion. Minimum temperature shall be 40F and maximum temperature shall be 140F 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.
- 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 shutdown."
- 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:
- (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."
- 22) With regard to Section 6.5 of ANSI N45.2.2 - 1972 titled Removal of Items from Storage: MP&L 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: "MP&L 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: MP&L will comply with the requirements of this Section with the clarification that, for record purposes, only the access of non-MP&L personnel 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-MP&L employees who are accompanied by MP&L employees.
- 24) With regard to Section 7.3 of ANSI N45.2.2 - 1972 titled Hoisting Equipment: 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 rerating 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 clarification:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, MP&L shall either control these activities under this Operational QA Program or under an NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA programmatic/administrative requirements included therein (Subject to the clarifications in item 1 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).
- 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 MP&L's commitment to Regulatory Guide 1.74.

Section 2.1 - Planning: MP&L 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 smaller 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 Site Area: Not applicable to the Operations phase. | 2

Section 3.2 - Control of Facilities: MP&L 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. | 2

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. | 2

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

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. | 2

Section 4 - Records: The requirements of Policy 17 and ANSI N45.2.9 as set forth in Appendix A of the Operational QA Program shall be implemented in lieu of the requirements of 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 | 2

The Operational Quality Assurance Program complies with the requirements of this guide with the following clarification: | 2

- 1) MP&L 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 QA Program commitment requirements. | 2
- 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; MP&L no longer specifically commits to ANSI N45.2 in the Operational QA Program. The fourth paragraph requires that the Standard be

imposed on personnel other than MP&L 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 MP&L's commitment to Regulatory Guide 1.74.
- 4) With regard to Section 2.5 of ANSI N45.2.6 - 1978 titled Physical: MP&L 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 MP&L, none are considered necessary.

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 clarification:

- 1) For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, MP&L shall either control these activities under this Operational QA Program or under an NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA programmatic/administrative requirements included therein (subject to the clarification in item 1 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.
- 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 MP&L's commitment to Regulatory Guide 1.74.
- 4) With regard to Section 11 (including subsections 11.1 through 11.7) of ANSI N45.2.11 - 1974, titled Audits: The MP&L 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

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 clarification:

- 1) MP&L 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 QA Program. See Policy 2, Paragraph 2.5.8.
- 2) In addition to the Standard's definition of "Inspection," MP&L will use the following: "Inspection (When used to refer to activities that are NOT performed by quality organization 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 MP&L intends for Inspections to be performed in accordance with the Operational QA Program by personnel certified as required by that Program and for activities defined by "Inspection" in ANSI N45.2.10, appropriate references to the plant quality organization which will perform the activity or to Quality Procedures 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.

- 3) In addition to the Standard's definition of "procurement documents," MP&L 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 acceptance, drawings, specifications, or instructions which define requirements for purchase)."
- 4) "Program Deficiencies" (Not defined in ANSI N45.2.10, but used and defined differently in ANSI N45.2.12) - Failure to develop, document or implement effectively any applicable element of the Operational QA 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 QA 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 QA Program, ANSI N45.2 may be imposed upon MP&L's suppliers.

- 6) "Checking" (Not defined in ANSI N45.2.10, but not to be confused with "checks") - The mechanism used by Plant Quality for assuring that an activity or program is being implemented at the plant site as required by approved procedures or the Operational Quality Assurance Program.
- 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 value positions indicating lights.
- 8) "NRC accepted Construction QA Program" - (1) a program for design or construction which was reviewed by the QA organization of the NRC and accepted for use; (2) the revision of that NRC accepted program which is in effect at the time that MP&L authorizes commencement of work; and (3) a program which the MP&L Quality Assurance organization reviews and concurs that the QA Program controls are acceptable for the activity to be performed.
- 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 one 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.

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

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

- 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.

- 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.

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, MP&L 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: MP&L'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.
- 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: "Active 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 Manager of Quality Assurance; 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)."

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."

2

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 clarification:

2

For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, MP&L shall either control these activities under this Operational QA Program or under an NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA 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

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

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

2

For operations phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, MP&L shall either control these activities under this Operational QA Program or under and NRC accepted Construction QA Program. When this Operational QA Program is used, MP&L shall comply with the Regulatory Position established in this Regulatory Guide in that QA 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

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 clarification:

- 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 MP&L'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:
 - (a) Item c is one of the options which may be used by MP&L 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 QA 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: MP&L will meet the requirements of Policies 4 and 7 of the Operational QA 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: MP&L 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 QA 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 QA Program" will be inserted in lieu of "ANSI N45.2, Section 7."
- 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 and 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 in 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 of sub-assembly 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 MP&L 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 QA Program, and the requirements of the individual nuclear facility Technical Specifications.

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 clarification:

- 1) With regard to Section 1.4 of ANSI N45.2.12 - 1977 titled Definitions: With one exception (Program Deficiencies) 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 MP&L's commitment to Regulatory Guide 1.74. The one excepted definition is 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 MP&L 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 QA 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 MP&L 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 QA Program.
- 4) With regard to Section 2.4 of ANSI N45.2.12 - 1977 titled Maintenance of Proficiency: The maintenance of proficiency of MP&L 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 QA Program.

- 5) With regard to Section 3.3 of ANSI N45.2.12 - 1977 titled Essential Elements of the Audit System: MP&L 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 (MP&L), effectiveness is reported as required by the individual nuclear facility Technical Specifications and paragraphs (currently numbered 1.3.2, 1.3.3 and 1.3.15) in Policy 1 and (currently 2.5.4) Policy 2 of the Operational QA Program. Other than audit reports, MP&L may not directly report on the effectiveness of the quality assurance programs to the audited organization when such organizations are outside of MP&L.

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

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 the quality organization) 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 MP&L 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: MP&L 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 Report) 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 Manager of Quality Assurance 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. MP&L will comply with an alternate sentence with reads: "When available, objective evidence shall be examined for compliance with quality assurance

program requirements. If subjective evidence is used (e.g., personnel interviews, direct observations by the auditor), 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 nonconformances are virtually "obvious" with respect to the needed corrective action: "When a nonconformance or quality assurance program deficiency 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."
 - (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. MP&L 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 nonconformance."
- 9) With regard to Section 4.3.3 of ANSI N45.2.12 - 1977 titled Post-Audit Conference: MP&L 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. MP&L 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 MP&L at the time the audit report is issued.

- (b) MP&L 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."
 - (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; MP&L may choose not to comply with this requirement. Instead, MP&L auditors/lead auditors are required to document all audit findings on Corrective Action Requests (CARs). The procedure for processing CARs 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 CAR with these "Auditor Recommendations" is then transmitted to the audited organization. In addition, the auditor/lead auditor is required to review the response to the CAR 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. MP&L 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: MP&L 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, (e.g. where the cause is already known, another organization has already investigated and found the cause, etc.) 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 the audit report. The response shall clearly state the corrective action taken or planned to prevent recurrence and the results of the investigation if conducted. In the event that corrective action is not completed by the time the response is submitted, the audited organization's response shall include a scheduled date for completion of planned corrective action: a followup response shall be provided stating the corrective action taken and the date that the action was completed. If corrective actions are verified as satisfactorily completed by the quality organization prior to the scheduled completion date, no followup response is required. The audited organization shall take appropriate action to assure that corrective action is accomplished as scheduled." The MQA may, at his discretion, waive the requirement for a supplementary response.

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

- 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 QA Program does not include a commitment to this standard; therefore, MP&L will comply with an alternate subsection 2.2.1 which reads:

Orientation to provide a working knowledge and understanding of the Operational QA Program, including the ANSI standards and Regulatory Guides included in Appendix A of that Program, and MP&L's procedures for implementing audits and reporting results.

- 2) With respect to Section 4.1 of ANSI N45.2.23 - 1978 titled Organizational Responsibility: MP&L will comply with this Section with the substitution of the following sentence in place of the last sentence in the Section.

The Manager of Quality Assurance, Quality Assurance Operations Supervisor, 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 Monitoring Audit Reports (MARs) will be performed by qualified auditors, but no assignment is made "prior to commencing the audit" since it is self-initiated.

- 3) With respect to Section 3.2 of ANSI N45.2.23 - 1978 titled Maintenance of Proficiency: MP&L will comply with the requirements of this Section by defining "annual assessment" as one which takes place every 12±3 months and which uses the initial date of certification (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: MP&L 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: MP&L will substitute the following sentence for this Section.

Qualification records shall be retained as required by the Operational QA Program.

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 Assurance Organization	Manager of Quality Assurance (5) Assistant Vice President, Nuclear Production Site Manager	Senior Vice President, Nuclear	Manager of Quality Assurance
<hr/>				
B. Quality Assurance Procedures	Quality Assurance Organization	Quality Assurance Organization	Manager of Quality Assurance	Manager of Quality Assurance
<hr/>				
C. Plant Staff Procedures				
1. Plant Quality Procedures	Plant Quality Organization	Plant Quality Superintendent Manager of Quality Assurance (5)	Plant Quality Superintendent	Plant Quality Superintendent
2. Administrative Procedures (Safety-Related)	Plant Staff	Nuclear Plant Manager Plant Quality Superintendent Plant Safety Review Committee	Nuclear Plant Manager	Nuclear Plant Manager

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>
C. 3. Special Test Procedures (per 10CFR50.59)	Plant Staff	Nuclear Plant Manager Plant Safety Review Committee Safety Review Committee Plant Quality Superintendent	Nuclear Plant Manager	Nuclear Plant Manager
4. Plant Section Procedures	Plant Staff	Section Supervisor Plant Quality Superintendent	Section Supervisor	Section Supervisor
5. Plant Section Instructions	Plant Staff	Section Supervisor	Section Supervisor	Section Supervisor
Assigned Reviewer (See Note 3)				
D. Nuclear Services Procedures	Nuclear Services Staff	Manager, Nuclear Services Manager of Quality Assurance (5)	Manager, Nuclear Services	Manager, Nuclear Services
E. Nuclear Procurement Procedure	Nuclear Production Staff	Assistant Vice President, Nuclear Production Site Manager Manager of Quality Assurance (5) Director of Purchasing & Stores	Senior Vice President, Nuclear	Nuclear Plant Manager

<u>DOCUMENT</u>	<u>PREPARED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>	<u>ISSUED BY</u>
F. Nuclear Plant Engineering Administrative Procedures	Nuclear Plant Engineering Staff	Manager of Nuclear Plant Engineering Manager of Quality Assurance (5)	Manager of Nuclear Plant Engineering	Manager of Nuclear Plant Engineering
G. Startup Manual	Startup Staff	Startup Manager Nuclear Plant Manager Plant Quality Superintendent	Startup Manager Nuclear Plant Manager	Startup Manager
H. Q-List	Nuclear Plant Engineering Staff	Manager of Nuclear Plant Engineering Nuclear Plant Manager Manager, Nuclear Services Manager of Quality Assurance (5)	Manager of Nuclear Plant Engineering	Manager of Nuclear Plant Engineering

- NOTE:
- 1) Responsible individuals listed above may have designated alternates who are authorized to perform function.
 - 2) Designated support organization (other MP&L organizations, contractors, consultants, etc.) may 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 Manager of Quality Assurance reviews these documents to assure quality requirements are addressed and provides concurrence.

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 Assurance</u> 1. Operational QA Manual 2. QA Procedure Manual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	QA Manuals describe the MP&L QA Program Policies for all 10CFR50, Appendix B Criteria, and provide appropriate implementation procedures. (QA Procedures are numbered by Appendix B Criteria)
	X	X		X	X	X				X					X	X	X	X	
B. <u>Nuclear Services</u> 1. Internal Procedures Manual	X	X	X	X	X	X	X	X							X	X	X		Emphasis of Nuclear Services Staff is on records management; licenses & permits; nuclear fuel cycle management; and SRC support
	X										X	X			X	X	X		
C. <u>Nuclear Plant Engineering</u> 1. 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.
D. <u>Plant Staff</u> 1. Operations Manual a. Safety Related Administrative Procedures b. Plant Quality Procedures	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
	X								X	X	X			X			X		
E. <u>Startup</u> 2. Startup Manual	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Emphasis of Startup Staff is on preoperational and startup activities.

RECORD OF REVISIONS ENTERED
IN
OPERATIONAL QUALITY ASSURANCE MANUAL

[illegible]

OPERATIONAL QUALITY ASSURANCE MANUAL
TITLE: REVISIONS ENTERED

REV. 2	DATE 6/1/81
PAGE 1 of 1	REVISIONS ENTERED

SUMMARY
ISSUED QUALITY ASSURANCE POSITION
STATEMENTS

<u>NUMBER</u>	<u>SUBJECT</u>	<u>DATE ISSUED</u>	
1	Selection & Training of Preoperational & Startup Testing Personnel	1/4/80 per PMI-79/1836 3/21/80 per APO-80/85 (Rev. 1) 6/10/81 per APO-81/266 (Rev. 2)	15
2	Temporary Change Procedure Approval	1/21/80 per PMI-80/122 5/23/80 per APO-80/147 (Rev. 1) 6/10/81 per APO-81/266 (Rev. 2)	15
3	Uncertainty Requirement for Calibration Standards	2/4/80 per PMI-80/265 5/1/80 per APO-80/104 (Rev. 1) 6/10/81 per APO-81/266 (Rev. 2)	15
4	Startup Engineer Restoring System to Design Drawings Requirements During System Run-In	3/21/80 per PMI-80/410 6/10/81 per APO-81/266 (Rev. 1)	15
5	Utilization of Materials/ Parts/Equipment on a Risk Basis Prior to Issuance of an Operating License ()	3/21/80 per PMI-80/410 6/10/81 per APO-81/266 (Rev. 1)	15
6	Incorporation of Approved Changes into Document within 30 days	3/21/80 per APO-80/85 6/10/81 per APO-81/266 (Rev. 1)	15
7	Applicability of Experience Requirement of ANSI N18.1 - 1971, Paragraph 4.4.1 and 4.4.2 prior to Unit 1 Fuel Load	3/21/80 per APO-80/85 6/10/81 per APO-81/266 (Rev. 1)	15
8	Design Control After Systems are Turned-Over to MP&L	10/29/80 per APO-80/366 6/10/81 per APO-81/266 (Rev. 1)	15
9	Generic Clarification (1st Para. App. A) to Standards, Codes, Regulations or Appen- dices Reference' to QA Stand- ards to which the Commits	6/10/81 per APO-81/266	15

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6/01/81

CROSS-REFERENCE
QA POSITION STATEMENT vs OQAM POLICY

<u>POLICY</u>	<u>QA POSITION STATEMENT APPLICABLE</u>	
Policy 1		
Policy 2		3
Policy 3	8	3
Policy 4		3
Policy 5		
Policy 6	2, 6	
Policy 7	5	
Policy 8	5	
Policy 9		
Policy 10	4	3
Policy 11	4	
Policy 12	3	
Policy 13		
Policy 14	5	3
Policy 15		
Policy 16	4	
Policy 17		
Policy 18		

APPENDIX

A	2, 4, 6, 8, 9	3
B		
C		

Rev. 3
6/01/81

QA INTERPRETATION

STATEMENT NUMBER 1

SUBJECT Selection & Training of Preoperational & Startup Testing Personnel

INQUIRY A Do Regulatory Guide 1.8 Rev. 1 and ANSI N18.1 - 1971 apply to the selection and training of MP&L preoperational & Startup testing personnel?

RESPONSE A With this revision to the OQAM, the manual no longer makes any commitment relative to the qualification of persons other than those in the QA organizations and those that perform inspections, examinations, and testing functions. Therefore a QA position on this subject is no longer appropriate. While we feel that the previously documented position would still be correct, any special inquiries should be directed to the MP&L Manager of Licensing & Safety.

INQUIRY B What regulatory requirement(s) do(es) apply to selection and training to MP&L preoperational & Startup testing personnel?

RESPONSE B It is MP&L QA's interpretation that Regulatory Guide 1.8, Rev. 2, Paragraph C.3 should be used and applied to the selection and training of MP&L preoperational & Startup testing personnel, but a specific answer must be obtained from the MP&L Manager of Licensing and Safety.

Rev. 2

6/01/81

QA INTERPRETATION

STATEMENT NUMBER 2

SUBJECT	Temporary Change Procedure Approval
INQUIRY	Are the requirements of ANSI N18.7 - 1976, Section 5.2.2 applicable to preoperational testing and Startup testing prior to fuel load?
RESPONSE	Yes. See OQAM, Appendix A, Regulatory Guide 1.33, clarification 14) which deals with Section 5.2.2 of ANSI N18.7 - 1976
REFERENCE	OQAM Policy 6, Paragraph 6.5.8 and Appendix A, Regulatory Guide 1.33, clarification 14); NRC Inspection Report 50-416/79-29, item 416/79-29-06; FSAR Q&R 14.2-48, Amendment 34.

2

Rev. 2

6/01/81

QA INTERPRETATION

STATEMENT NUMBER 3

SUBJECT Uncertainty Requirements for Calibration Standards

INQUIRY What is the uncertainty requirement for Standards used to calibrate
Standards of lesser accuracy?

RESPONSE See OQAM, Policy 12, Paragraphs 12.5.6 and 12.5.7. Additional
information on this issue, relative to calibration by MP&L sup-
pliers, is provided as follows:

When equipment (MP&L owned/rented) is calibrated by a supplier,
the supplier must be required to comply with the accuracy
requirements of Policies 12.5.6 and 12.5.7 as appropriate. The
supplier may be allowed to deviate from these accuracy require-
ments, to the extent noted in Policies 12.5.6 and 12.5.7,
provided the justification and basis of acceptance have been
evaluated by MP&L for technical adequacy and authorized by the
responsible MP&L management. Documentation of this evaluation
and authorization shall be the responsibility of MP&L

REFERENCE OQAM Policy 12 Paragraphs 12.5.6 and 12.5.7; NRC Standard Review
Plan, NUREG-75/087, Rev. 1, Paragraphs 12.6 and 12.7.

Rev. 2

6/01/81

QA INTERPRETATION

STATEMENT NUMBER 4

SUBJECT Startup Engineer Restoring System to Design Drawings Requirements
During System Run-In

INQUIRY During System Run-In, is the Startup Engineer allowed to return the
system to design drawing requirements prior to quality and engineer-
ing evaluations?

NOTE: The Startup Engineer may need to direct work by MP&L Opera-
tions or Maintenance Personnel.

RESPONSE Yes. See OQAM, Appendix A, Regulatory Guide 1.33, clarification 16)
which deals with Section 5.2.7 of ANSI N18.7 - 1976, the second
paragraph of that clarification (page 8 of 27). However, the
following additional requirements apply with respect to the after-
the-fact evaluation:

- 1) The engineering evaluation is to be made to meet the require-
ments of OQAM 3.5.2, 3.5.3, 3.5.6, and 3.5.12; and,
- 2) The quality evaluation is to be made to meet the requirements of
OQAM 10.4.2, 10.5.7, 10.5.10, 10.5.11, and 16.5.2.

REFERENCE OQAM Policies 3, 10, 11 and 16, Paragraphs 3.5.2, 3.5.3, 3.5.6,
3.5.12, 10.4.2, 10.5.7, 10.5.10, 10.5.11, 11.5.3, 11.5.7.1,

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11.5.7.7, 11.5.8, 16.4.2 (3rd sentence), 16.5.2, 16.5.3, 16.5.4;
and, Appendix A, clarification 16) to Regulatory Guide 1.33 (ANSI
N18.7 - 1976).

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QA INTERPRETATION

STATEMENT NUMBER 5

SUBJECT	Utilization of Materials/Parts/Equipment on a Risk Basis Prior to Issuance of An Operating License (OL)	1
INQUIRY	Is it allowable for Startup to install equipment or parts under a conditional release process and use on a "risk basis" during system run-in and preoperational testing?	
RESPONSE	Yes. For conditions and limitations see OQAM Policy 7, Paragraph 7.5.8; Policy 8, Paragraph 8.5.8; and Policy 14, Paragraph 14.5.5.	1
REFERENCE	OQAM Policies 7, 8 and 14, Paragraphs 7.5.3 (Second Paragraph), 7.5.8, 8.5.8, and 14.5.5.	

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QA INTERPRETATION

STATEMENT NUMBER 6

SUBJECT	Incorporation of Approved Changes into Document within 30 days
INQUIRY	Is it possible to allow more than thirty days to incorporate changes in procedures issued/revised prior to issuance of the Operating License?
RESPONSE	Yes. Provided that the changes are handled with a Temporary Change Notice (TCN), the thirty day requirement may be waived as allowed by OQAM Policy 6, Paragraph 6.5.8.
REFERENCE	OQAM Policy 6, Paragraph 6.5.8 and Appendix A, Regulatory Guide 1.33, Clarifications 14 (and Section 5.2.2 and ANSI N18.7 which it references) and 22 (and Section 5.2.15 of ANSI N18.7 which it references)
APPLICABILITY	Startup test and other procedures issued and revised PRIOR to issuance of an Operating License (OL) on the affected unit.

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QA INTERPRETATION

STATEMENT NUMBER 7

SUBJECT	Applicability of Experience Requirement of ANSI N18.1- 1971 Paragraphs 4.4.1 and 4.4.2 prior to Unit I Fuel Load	1
INQUIRY	Do the experience requirements stated in Paragraphs 4.4.1 and 4.4.2 of ANSI N18.1 - 1971 apply to those engineers (who perform engineering functions) who lack the experience required at this time, but who would meet the requirement at the time of initial core loading?	
RESPONSE	With this revision to the OQAM, the manual no longer makes any commitment relative to the qualification of persons other than those in the QA organizations and those that perform inspections, examinations, and testing functions. Therefore a QA position on this subject is no longer appropriate. While we feel that the previously documented position would still be correct, any specific inquiries should be made to the MP&L Manager of Licensing & Safety.	1

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QA INTERPRETATION

STATEMENT NUMBER 8

SUBJECT	Design Control After Systems are Turned-Over to MP&L
INQUIRY	Can design changes for systems already turned-over to MP&L be implemented by the AE/Constructor using his QA Program?
RESPONSE	Yes. OQAM Policy 3, Paragraph 3.5.18 specifies the controls to be used and the requirements to be imposed. An alternate method would be for Plant Staff to implement the design changes in accordance with the MP&L Operational QA Manual (MPL-TOP-1A). If this alternate method is used PRIOR to issuance of the Unit 1 Operating License (OL), Plant Staff shall provide written notice to the Manager of Quality Assurance PRIOR to implementing the design change process.
REFERENCE	OQAM Policy 3 and Appendix A, Regulatory Guide 1.64 and ANSI N45.2.11 - 1974 which it references.

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QA INTERPRETATION

STATEMENT NUMBER 9

SUBJECT Generic Clarification (first paragraph in Appendix A) to Standards, Codes, Regulations or Appendices Referenced in QA Standards to which MP&L Commits

INQUIRY How does this generic clarification impact our current procedures and practices, and why was the clarification necessary or desirable?

RESPONSE The clarification was necessary and desirable since, without it, we could have been subject to secondary commitments which were not evaluated by management. Previously (prior to the clarification) if we committed to a standard that could mean, unless we took some specific exception, that we also committed to the codes and any other standards or regulations referenced in, and appendices to, that standard. Thus, MP&L could commit to Standard A dated 1974 and later commit to Standard B dated 1978: prior to our clarification, if Standard B referenced a later edition of Standard A, we could have been committed to that later version of Standard A. Our clarification parallels the NRC caveat used in their Regulatory Guides

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that endorse ANSI standards. As an example, words similar to "The specific applicability of referenced codes and standards within this standard have been or will be addressed in other regulatory guides or in Commission regulations where appropriate" are often used.

Since our procedures are written to fulfill and implement the requirements of the version of the standard listed in Appendix A, there should be no impact from the "back-door commitment to a later version of the Standard" aspect, since we had never considered that implication. However, we had previously considered much of the guidance given in the appendices to the standards as requirements; now we are relieved from being regulated to guidance given in these appendices. This will mean no basic change in the way that we perform our various tasks; but, in the next revision to our procedures, sentences which preface guidance items (those from the appendix to a standard) with the verbs "shall" or "will," should be replaced with the verb "must." Further, those managers who write implementing procedures may now elect to delete a guidance item altogether; however, some alternate method of accomplishing the controlled activity should be substituted.

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Policy 2, Sections 2.5.8.4 and 2.5.10 as well as Policy 5, Section 5.5.6 should be consulted for additional pertinent guidance.

APPLICABILITY We are not required to comply with references within ANSI Standards to other ANSI Standards, specific examples include, but are not limited to:

ANSI N45.2.4, Section 9 (Reg. Guide 1.30);

ANSI N45.2.7, Section 5.2.7 (4th paragraph), Section 5.2.7.2, Section 6 (Reg. Guide 1.33);

ANSI N45.2.2, Sections 2.6 and 3.1 and all references to Appendix A (Reg. Guide 1.38);

ANSI N45.2.3, Section 3.3 (2nd paragraph) and Section 3.1 (Reg. Guide 1.39);

ANSI N45.2.6, Section 5 (Reg. Guide 1.58);

ANSI N45.2.13, Section 1.2.2 (Item d), subsections 3.2.2 and 3.2.3 (Reg. Guide 1.123); and,

ANSI N45.2.23, subsections 2.3.3.1 and 2.3.3.5 (Reg. Guide 1.146).

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