QAPM Revision 3

Package Contains:

50.54(a) Evaluation Documentation

Marked up pages showing where new material is entered.

Supporting documentation

Complete Revision 3

EOI Quality Assurance Program Manual
Change Review Form

PROPOSED CHANGES:

1) QAPM Section C.2.a: Insert at end of section C.2.a.2: "A grace period of 90 days may be applied to the 24-month frequency for internal audits. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date."

2) QAPM Table 1, Section G: Add new item 5 for ANSI N 45.2.6, section 2.3, stating: "This section requires, in part, that any person who has not performed inspection, examination, or testing activities in his qualified area for a period of one year shall be re-evaluated. A 90-day grace period may be applied to this activity. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date."

3) QAPM Table 1, Section N: Add new item 3 for Reg. Guide 1.144, Section C.3.b. (2) stating: "This section requires that supplier audits be performed on a triennial basis. A 90-day grace period may be applied to this activity. For activities deferred in accordance with the 90-day grace period, the next performance date will be based on their originally scheduled date."

4) QAPM Table 1, Section O: Add new item 3 for ANSI N45.2.23, Sections 3.2 and 5.3, stating: "These sections require that an annual assessment be performed of each lead auditor's qualification and that each lead auditor's records be updated annually. A 90-day grace period may be applied to these activities. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date."

10CFR50.54a(3) REVIEW:

1) Does the proposed change represent a reduction of commitment to the QA Program description previously accepted by the NRC? Yes *X No

*See Recommendation section below

Explain:

1) Since EOI is committed to RG 1.33, ANSI N18.7 audit frequency requirements are invoked which state that audits of safety-related activities are completed "within two years". This change is intended to allow a 90-day grace period to the required frequencies to allow some limited additional flexibility in audit scheduling activities associated with this Reg Guide where there has been none.

2) This change is intended to provide additional flexibility to the previously inflexible one-year period of inactivity requiring inspector reevaluation.

3) The commitment to Reg Guide 1.144 requires that supplier audits be performed on a triennial basis. This change is intended to provide additional flexibility in scheduling activities associated with supplier audits while maintaining the triennial basis requirement.

4) These sections require an annual assessment of the auditor's qualifications and update of qualification records. This change is intended to provide flexibility in the periodicity requirement for performing these activities.

Letter USNRC to Rochester Gas and Electric Corp. dated July 22, 1997, subject: "Approval of Proposed Revision 25 to the RG&E R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation (TAC No. MA 0391) addresses USNRC approval for changes identical to EOI QA Program Manual changes discussed in 1), 2), 3), &4) above. This letter provides NRC approval of the changes stating that: "... While the proposed 90-day deferral period (grace period) for the activities described constitutes a reduction in commitments in the QA Program previously approved by the NRC, such exceptions continue to satisfy the provisions of Section17.2 of the SRP. Therefore, proposed revision continues to comply with the quality assurance criteria of Appendix B to 10 CFR50 and is acceptable.

2) If item 1 above is YES, does the proposed change include the basis to conclude that the revised program incorporating the change continues to meet the criteria of 10 CFR50, Appendix B and other previously accepted FSAR commitments? Yes No

RECOMMENDATION:

This change falls under the 2/23/99 NRC Direct Final Rule (64FR9029), item 2: "Incorporation of a QA alternative or exception previously approved by an NRC safety evaluation, provided that the basis of the NRC approval are applicable to the licensee". This provision allows the EOI proposed change not to be considered a reduction in commitments and thereby permits the licensee to make the same type of change to its QA Program without prior NRC approval. Based on the above, these changes can be implemented immediately with no further NRC approval required.

Recommended By: W. H. Gamm / Wm. F. Elge Date 2-29-2000 / 3-6-2000

DISPOSITION:

X Approved for implementation ____ Disapproved

____ Approved for submittal to NRC for acceptance

Approved By: V.P. for Ops. Supt. Date 3/6/00

Vice President, Operations Support
(or assigned designee)

C.2.a. (continued)

2. Audit schedules assure that the following areas are audited at the indicated frequencies, or more frequently as performance dictates.

   a. The conformance of each unit's operation to provisions contained within the Technical Specifications and applicable license conditions is audited at least once every 24 months.

   b. The performance, training, and qualifications of the entire staff is audited at least once every 24 months.

   c. The results of actions taken to correct deficiencies occurring in unit equipment, structure, systems, or method of operation that affect nuclear safety is audited at least once every 24 months.

   d. The performance of activities required by the QAPM to meet the criteria of 10 CFR 50, Appendix B is audited at least once every 24 months.

   e. The Offsite Dose Calculations Manual and Process Control Program and implementing procedures is audited at least once every 24 months.

   f. The radiological environmental monitoring program and the results thereof is audited at least once every 24 months.

   g. A fire protection and loss prevention program inspection and audit shall be performed using either off-site licensee personnel or an outside fire protection firm at least once 12 months.

   h. The fire protection program and implementing procedures at least once 24 months.

PROPOSED CHANGE #1
INSERT NEW ITEM 3. →

   i. A fire protection and loss prevention program inspection and audit shall be performed using an outside fire consultant at least once 36 months.

b. Audits shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items and a review of documents and records, as applicable.

Table 1
Regulatory Commitments

G. Regulatory Guide 1.58 Revision 1, dated September 1980

	Clarification/Exception
1. General	Entergy 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 the Technical Specifications or other QAPM commitment requirements.
2. General	Certification of inspectors in accordance with this guide is approved by a manager responsible for quality assurance except for inspectors performing inspections as part of the procurement process. These inspectors may be approved by a manager responsible for materials, purchasing, and contracts.
3. ANSI N45.2.6 Section 1.2	Paragraph 4 requires that the standard be imposed on personnel other than licensee employees; the applicability of this standard to suppliers will be documented and applied, as appropriate, in procurement documents for such suppliers.
4. ANSI N45.2.6 Section 1.2	The requirements of this standard do not apply to personnel using later editions of ASNT contained within 10CFR50.55a approved ASME editions or addenda.
6 5. ANSI N45.2.6 Section 2.5	This section's requirements are clarified 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, none are considered necessary.
7 6. ANSI N45.2.6 ↓ Section 3.5	Entergy reserves the right to use personnel who do not meet these experience requirements but have shown capability through training and testing or capability demonstration.

PROPOSED CHANGE #2
INSERT NEW ITEM 5

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980

		Clarification/Exception
1.	RG 1.144 Section C.3.a.(2)	This section is not applicable.
2.	RG 1.144 Section C.3.b.(2)	In addition to the requirements of this section, previously evaluated and approved active suppliers for which auditing is not the selected method of source verification should be evaluated concurrent with the award of a contract. Regardless of the evaluation results, active suppliers (except those excluded under C.3.b(1)) are source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed. Inactive suppliers are evaluated prior to supplying items or services. An audit shall be conducted if required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or another method allowable under 10 CFR 50 Appendix B, Criterion VII).
4.	RG 1.144 Section C.3.b.(2)	Instead of the annual documented evaluation of suppliers discussed in this section, an ongoing evaluation of supplier performance is conducted which takes into account, where applicable, the other considerations of this section and paragraph of the Regulatory Guide.
5.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
6.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.

PROPOSED CHANGE #3
INSERT NEW ITEM 3.

Table 1
Regulatory Commitments

O. Regulatory Guide 1.146 Revision 0, dated August 1980

		Clarification/Exception
1.	ANSI N45.2.23 Section 2.3.1.3	Holders of NRC-issued Reactor Operator/Senior Reactor Operator Licenses comply with the requirements of this section and may be awarded two credits.
2.	ANSI N45.2.23 Section 2.3.4	Prospective lead auditors shall demonstrate their ability to effectively implement the audit process and lead an audit team. They shall have participated in at least one audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively lead audits, licensee management may designate a prospective lead auditor as a "lead auditor".

→ 3.

PROPOSED CHANGE #4

ADD ITEM 3.0

July 22, 1998

Dr. Robert C. Mecredy
Vice President, Nuclear Operations
Rochester Gas and Electric Corporation
89 East Avenue
Rochester, NY 14649

SUBJECT: APPROVAL OF PROPOSED REVISION 25 TO THE ROCHESTER GAS AND ELECTRIC CORPORATION'S R. E. GINNA NUCLEAR POWER PLANT QUALITY ASSURANCE PROGRAM FOR STATION OPERATION (TAC NO. MA0391)

Dear Dr. MeCredy:

By letter dated December 17, 1997, you transmitted proposed Revision 24 to the R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation (QAPSO). Revision 24 to the QAPSO was submitted in accordance with the requirements of 10 CFR 50.54(a)(3) as reflecting changes that reduced commitments in the QAPSO description previously approved by the NRC. However, this submittal also included changes for which RG&E was not seeking NRC approval based on the licensee's conclusion that they had no impact on commitments in the QAPSO.

As a result of requests for additional information by the NRC staff and additional reorganization changes, you amended or clarified the original submittal via correspondence dated April 6, 1998. This submittal forwarded Revision 25 to the QAPSO which provided additional justification for changes previously identified as reductions in commitment in Revision 24 to the QAPSO, and also identified new organizational changes for which you were not seeking NRC approval. Therefore, Revision 25 to the QAPSO superseded Revision 24 in its entirety.

The enclosed safety evaluation documents the bases for our conclusion that the reductions in commitments identified in Revision 25 to the QAPSO continue to satisfy the requirements of Appendix B to 10 CFR Part 50 and are, therefore, acceptable.

Sincerely,

Original Signed by:

Guy S. Vissing, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-244

Enclosure: Safety Evaluation

cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
PROPOSED REVISION 25 TO THE ROCHESTER GAS AND ELECTRIC CORPORATION
QUALITY ASSURANCE PROGRAM FOR STATION OPERATION
R. E. GINNA NUCLEAR POWER PLANT
DOCKET NO. 50-244

1.0 INTRODUCTION

By letter dated December 17, 1997, Rochester Gas and Electric Corporation (RG&E) transmitted proposed Revision 24 to the R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation (QAPSO). Revision 24 to the QAPSO was submitted in accordance with the requirements of 10 CFR 50.54(a)(3) as reflecting changes that reduced commitments in the QAPSO description previously approved by the NRC. However, this submittal also included changes for which RG&E was not seeking NRC approval based on the licensee's conclusion that they had no impact on commitments in the QAPSO.

As a result of requests for additional information by the NRC staff (Reference 2) and additional reorganization changes, RG&E amended or clarified its original submittal via correspondence dated April 6, 1998 (Reference 3). This submittal forwarded Revision 25 to the QAPSO which provided additional justification for changes previously identified as reductions in commitment in Revision 24 to the QAPSO, and also identified new organizational changes for which RG&E was not seeking NRC approval. Therefore, Revision 25 to the QAPSO superseded Revision 24 in its entirety. This evaluation only addresses changes in Revision 25 to the QAPSO which RG&E has deemed to be reductions in commitment pursuant to 10 CFR 50.54(a)(3).

2.0 EVALUATION

In its December 17, 1997, submittal (Reference 1), RG&E proposed to establish that a "grace period" of twenty five per cent (25%), not to exceed 90 days, be applied to frequencies for performance of periodic activities described in the QAPSO and the regulatory guides and standards listed in the QAPSO, Table 17.1.7-1, "Conformance of Ginna Station Program to Quality Assurance Standards, Requirements, and Guides."

In its request for additional information (RAI) dated April 6, 1998, the NRC requested that RG&E supplement its submittal to clarify which specific periodic activities described in Table 17.1.7-1 of the QAPSO would be affected by the (plus) 25% "grace period." NRC also requested that RG&E describe the impact of the proposed deferral on RG&E's audit activities and corresponding commitments to Regulatory Guide (RG) 1.33, "Quality Assurance Program Requirements (Operation)", and RG 1.144, "Auditing of Quality Assurance Programs for Nuclear Power Plants." RG&E incorporated its response to the NRC's RAI in Revision 25 to QAPSO which was transmitted via letter dated June 4, 1998. In this revision to the QAPSO, RG&E proposed to revise its commitments to RGs and standards as necessary to apply a grace period of 90 days for the performance of the following activities:

- Annual Supplier Evaluations in accordance with RG 1.144, Revision 1 (Section C.3.b.2)

- Triennial Vendor Audits in accordance with RG 1.144, Revision 1 (Section C.3.b.(2))

- Recertification in accordance with ANSI N45.2.23-1978, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants" (Sections 3.2 and 5.3)

- Annual Evaluations in accordance with ANSI N45.2.6-1978, "Qualifications of Inspection, Examination, and Testing Personnel for Nuclear Power Plants" (Section 2.3)

- Internal Audits in accordance with ANSI N18.7-1972, (Section 4.4)

Specifically, RG&E has proposed to modify its RG commitment as follows:

1. RG 1.33, Revision 0

   Internal Audits - Section C.3.a.(1) of RG 1.144 refers to RG 1.33 for requirements. Since RG&E is committed to RG 1.33, Revision 0, except for Appendix A, ANSI N18.7-1972 requirements are invoked. A grace period of 90 days will be applied to the 24-month frequency for internal audits described in Section 4.4 of ANSI N18.7-1972, which states that audits of safety related activities are completed "within a period of two years." RG&E noted that this grace period will not be applied to audits of the Nuclear Emergency Response Plan to satisfy the requirements of 10 CFR 50.54(t), and Station Security Plan to satisfy the requirements of 10 CFR 50.54(p)(3), 73.56(g)(1) and (g)(2) and 10 CFR 73.55(g)(4). Audit frequency and further discussion of these audits are described in their respective plans.

2. RG 1.58, "Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel," Revision 1

   Annual Evaluations - Section 2.3 of ANSI N45.2.6-1978 states that "Any person who has not performed inspection, examination, or testing activities in his qualified area for a period of one year shall be reevaluated..." The 90-day grace period will be applied to this activity.

3. RG 1.144, Revision 1

   (a) Supplier Audits - Section C.3.b.(2) of Reg. Guide 1.144, Revision 1 states that audits be performed on a "triennial basis." The 90-day grace period will be applied to this activity. Section 17.2.5 of the QAPSO is being revised to allow for application of the grace period.

   (b) Supplier Evaluations - Section C-3.b.(2) of Reg. Guide 1.144 Revision 1 states that documented evaluations be performed "annually". The 90-day grace period will be applied to this activity.

(c) Revised commitment to perform vendor audits from "at least every three years" to "on a triennial basis" to be consistent with the wording used in RG 1.144, Revision 1, Section C.3.b.(2).

4. RG 1.146, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants." Revision 0

Lead Auditor Recertifications - Sections 3.2 and 5.3 of ANSI N45.2.23-1978 require that an annual assessment be performed of each lead auditor's qualification and that each lead auditor's records be updated annually. The 90-day grace period will be applied to this activity.

Additionally, RG&E modified QAPSO Section 17.1.7, "Regulatory Commitments," to establish a commitment that for activities deferred in accordance the 90-day "grace period," the next performance due date for such activities will be based on their originally scheduled date, i.e., in all cases, the periodicity for these activities will not be allowed to exceed the original RG commitment plus 90 days.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," requires, in part, that the quality assurance program provide for indoctrination and training of personnel performing activities affecting quality as necessary to ensure that such personnel achieve and maintain suitable proficiency, and it also establishes that audits of the quality assurance programs for these facilities (including their suppliers) be conducted at regular intervals. As described above, RG&E relies on its commitments to RGs 1.33, 1.58, 1.144, and 1.146 to satisfy these requirements.

While Appendix B to 10 CFR Part 50 provides that audits be performed "periodically," and that suitable personnel proficiency be maintained, it does not provide specific intervals for performing these activities. As a result, the NRC established nominal periodicity intervals for certain activities described in RGs 1.33, 1.58, 1.144, and 1.146. However, the NRC staff's regulatory position on the required periodicity for these activities was not aimed at preventing flexibility in the scheduled performance of such activities but rather at providing an objective measure for ensuring plant personnel proficiency and suitable periodic intervals for activities affecting quality as required by the regulations.

Since the 90-day grace period proposed by RG&E only aims to allow some limited additional flexibility in scheduling activities associated with the subject RGs, personnel proficiency standards and periodicity objectives in the QAPSO will remain unchanged. This is consistent with the provisions in Section 17.2 of NUREG-0800, "Standard Review Plan," (SRP) and is, therefore, acceptable.

3.0 CONCLUSION

While the proposed 90-day deferral period (grace period) proposed by RG&E for the RG activities described above constitute a reduction in commitments in the QA program description previously approved by the NRC, such exceptions continue to satisfy the

provisions of Section 17.2 of the SRP. Therefore, proposed Revision 25 to RG&E's QAPSO, dated June 4, 1998, continues to comply with the quality assurance criteria of Appendix B to 10 CFR Part 50 and is acceptable.

- 4 -

4.0 REFERENCES

1.0 Robert C. Mecredy (RG&E) letter to USNRC, "Revised Submittal of Quality Assurance Program for Station Operation - R.E. Ginna Nuclear Power Plant - Docket No. 50-244," dated December 17, 1997.

2.0 USNRC, Letter to RG&E, "Request for Additional Information Concerning Revision 24 of the Quality Assurance Plan for the R.E. Ginna Nuclear Power Plant (TAC No. MA0391)," dated April 6, 1998.

3.0 Robert C. Mecredy (RG&E) letter to USNRC, "Revised Submittal of Quality Assurance Program for Station Operation - R.E. Ginna Nuclear Power Plant - Docket No. 50-244," dated June 4, 1998.

Principal Contributor: J. Peralta

Date: July 22, 1998

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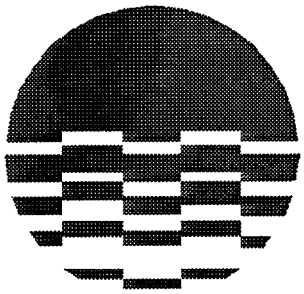

Entergy

Quality Assurance Program Manual

Arkansas Nuclear One
Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

River Bend Station
Docket No. 50-458
License No. NPF-47

Waterford 3 Steam Electric Station
Docket No. 50-382
License No. NPF-38

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A. MANAGEMENT

1. Methodology

a. The Quality Assurance Program Manual (QAPM) provides a consolidated overview of the quality program controls which govern the operation and maintenance of Entergy Operations, Inc.'s (Entergy's) quality related items and activities. The QAPM describes the quality assurance organizational structure, functional responsibilities, levels of authority, and interfaces.

b. The requirements and commitments contained in the QAPM are mandatory and must be implemented, enforced, and adhered to by all individuals and organizations. Employees are encouraged to actively participate in the continued development of the QAPM as well as its implementation. Changes should be promptly communicated when identified.

c. The QAPM applies to all activities associated with structures, systems, and components which are safety related or controlled by 10 CFR 72. The QAPM also applies to transportation packages controlled by 10 CFR 71. The methods of implementation of the requirements of the QAPM are commensurate with the item's or activity's importance to safety. The applicability of the requirements of the QAPM to other items and activities is determined on a case-by-case basis. The QAPM implements 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

d. The QAPM is implemented through the use of approved procedures (i.e., policies, directives, procedures, instructions, or other documents) which provide written guidance for the control of quality related activities and provide for the development of documentation to provide objective evidence of compliance.

2. Organization

The organizational structure responsible for implementation of the QAPM is described below. The specific organization titles for the quality assurance functions described are identified in procedures. The authority to accomplish the quality assurance functions described is delegated to the incumbent's staff as necessary to fulfill the identified responsibility.

A.2 (continued)

a. The chief executive officer is responsible for providing top level direction of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief executive officer provides guidance with regards to company quality assurance policy.

b. The chief operating officer reports to the chief executive officer and is responsible for the implementation of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief operating officer provides guidance with regards to company quality assurance policy.

c. The following executives report to the chief operating officer:

1. The executive responsible for overall plant nuclear safety at each site is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program at the respective site and overseeing activities of the associated off-site safety review committee.

2. The executive responsible for operations support is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program of Entergy's corporate activities and maintaining this QAPM in accordance with regulatory requirements.

3. The executive responsible for engineering is responsible for providing engineering services.

d. The individuals fulfilling the following management functions report to the executives identified above. These individuals may report through an additional layer of management but shall maintain sufficient authority and organizational freedom to implement the assigned responsibilities. These individuals may be responsible for a single unit/location or for multiple units/locations and may fulfill more than one function described below:

1. The manager responsible for quality assurance has overall authority and responsibility for establishing, controlling, and verifying the implementation and adequacy of the quality assurance program as described in this QAPM including activities related to vendor quality. The manager responsible for quality assurance has the authority and responsibility to escalate matters directly to the chief executive officer when needed.

A.2.d (continued)

2. The manager responsible for plant operations assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. The functional responsibility includes:

   a. chemistry,
   b. operations,
   c. maintenance,
   d. radiological protection,
   e. implementation of design activities,
   f. work control,
   g. tests,
   h. on-site safety review committee, and
   i. maintenance of the plant in conformance with approved design.

3. The manager responsible for plant modification provides direction, control, and overall supervision of the implementation of plant modifications and assigned maintenance. Separate managers may be responsible for different modification activities.

4. The manager responsible for training provides direction, control, and overall supervision of all training of personnel required by regulations.

5. The manager responsible for records management provides direction, control, and overall supervision of the records management program and associated activities.

6. The manager responsible for document control provides direction, control, and overall supervision of the document control program and associated activities.

7. The manager responsible for the corrective action program provides direction, control, and overall supervision of the corrective action program and associated activities.

8. The manager responsible for engineering is responsible for the development and maintenance of engineering programs, policies, and procedures and for providing engineering services. Different aspects of these responsibilities (e.g., fuel design) may be fulfilled by separate managers.

A.2.d (continued)

9. The manager responsible for materials, purchasing, and contracts is responsible for procurement, services, receipt, storage, and issue of materials, parts, and components. Different aspects of these responsibilities may be fulfilled by separate managers.

e. The on-site and off-site safety review committees independently review activities to provide additional assurance that the units are operated and maintained in accordance with the Operating License and applicable regulations which address nuclear safety.

3. Responsibility

a. Entergy has the responsibility for the scope and implementation of an effective quality assurance program.

b. Entergy may delegate all or part of the activities of planning, establishing, and implementing the quality assurance program to others, but retains the responsibility for the program's effectiveness.

c. The adequacy of the QAPM's implementation is assessed annually by the manager(s) responsible for quality assurance and reported to the chief executive officer and the associated executive for overall plant nuclear safety.

d. Entergy is responsible for ensuring that the applicable portion(s) of the quality assurance program is properly documented, approved, and implemented (people are trained and resources are available) before an activity within the scope of the QAPM is undertaken by Entergy or by others.

e. Individual managers are to ensure that personnel working under their management cognizance are provided the necessary training and resources to accomplish their assigned tasks within the scope of the QAPM.

f. Procedures that implement the QAPM are approved by the management responsible for the applicable quality function. These procedures are to reflect the QAPM and work is to be accomplished in accordance with them.

A. (continued)

4. Authority

a. When Entergy delegates responsibility for planning, establishing, or implementing any part of the overall QA program, sufficient authority to accomplish the assigned responsibilities is delegated.

b. The manager responsible for quality assurance has the responsibility and the authority to stop unsatisfactory work and control further processing, delivery, installation, or use of non-conforming items or services. Cost and schedule considerations will not override safety considerations.

5. Personnel Training and Qualification

a. Personnel assigned to implement elements of the quality assurance program are capable of performing their assigned tasks.

b. Training programs are established and implemented to ensure that personnel achieve and maintain suitable proficiency.

c. Personnel training and qualification records are maintained in accordance with procedures.

d. Additional details concerning Personnel Training and Qualification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.8, 1.58, and 1.146).

6. Corrective Action

a. It is the responsibility of each individual to promptly identify and report conditions adverse to quality. Management at all levels encourages the identification of conditions that are adverse to quality.

b. A corrective action program is established and implemented that includes prompt identification, documentation, and correction of conditions adverse to quality. The corrective action program for significant conditions adverse to quality shall require cause determination (when possible) and a corrective action plan that should lessen the likelihood of the recurrence.

A.6 (continued)

c. Specific responsibilities within the corrective action program may be delegated, but Entergy maintains responsibility for the program's effectiveness.

d. Non-conforming items are properly controlled to prevent their inadvertent test, installation, or use. They are reviewed and either accepted, rejected, repaired, or reworked.

e. Reports of conditions that are adverse to quality are analyzed to identify trends in quality performance. Significant conditions adverse to quality and significant trends are reported to the appropriate level of management.

f. Additional details concerning corrective action activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. Regulatory Commitments

a. Except where alternatives are identified, Entergy complies with the QA guidance documents listed on Table 1. If the guidance in one of these documents is in conflict with the QAPM, the guidance provided in the QAPM is the controlling guidance. Additionally, the following clarifications apply to all guidance documents listed in Table 1:

1. For modifications and nonroutine maintenance, guidance applicable to construction-like activities is applicable to comparable plant activities. Except that the inspection of modifications, repairs, rework, and replacements shall be in accordance with the original design and inspection requirements or a documented approved alternative.

2. The definitions provided by Regulatory Guide 1.74 and associated clarifications as described in Table 1 apply wherever the defined term is used in the QAPM and associated guidance documents.

3. Clarification to a guidance document applies wherever the guidance document is invoked.

A.7.a (continued)

4. In each of the ANSI standards, other documents (e.g., other standards, codes, regulations, tables, or appendices) are referenced or described. These other documents are only quality assurance program requirements if explicitly committed to in the QAPM. If not explicitly committed to, these documents are not considered as quality assurance program requirements, although they may be used as guidance.

5. Guidance applicable to safety related items and activities is applicable to comparable items and activities controlled by 10 CFR 72 and transportation packages controlled by 10 CFR 71.

b. The NRC is to be notified of QAPM changes in accordance with 10 CFR 50.54(a)(3).

B. PERFORMANCE/VERIFICATION

1. Methodology

a. Personnel performing work activities such as design, engineering, procurement, manufacturing, construction, installation, startup, maintenance, modification, operation, and decommissioning are responsible for achieving acceptable quality.

b. Personnel performing verification activities are responsible for verifying the achievement of acceptable quality and are different personnel than those who performed the work.

c. Work is accomplished and verified using instructions, procedures, or other appropriate means that are of a detail commensurate with the activity's complexity and importance to safety.

d. Criteria that define acceptable quality are specified, and quality is verified against these criteria.

2. Design Control

a. The design control program is established and implemented to assure that the activities associated with the design of systems, components, structures, and equipment and modifications thereto, are executed in a planned, controlled, and orderly manner.

B.2 (continued)

b. The program includes provisions to control design inputs, processes, outputs, changes, interfaces, records, and organizational interfaces.

c. Design inputs (e.g., performance, regulatory, quality, and quality verification requirements) are to be correctly translated into design outputs (e.g., specifications, drawings, procedures, and instructions).

d. The final design output is to relate to the design input in sufficient detail to permit verification.

e. The design process is to ensure that items and activities are selected and independently verified consistent with their importance to safety to ensure they are suitable for their intended application.

f. Changes to final designs (including field changes and modifications) and dispositions of non-conforming items to either use-as-is or repair are to be subjected to design control measures commensurate with those applied to the original design and approved by the organization that performed the original design or a qualified designee.

g. Interface controls (internal and external between participating design organizations and across technical disciplines) for the purpose of developing, reviewing, approving, releasing, distributing, and revising design inputs and outputs are defined in procedures.

h. Design documentation and records, which provide evidence that the design and design verification process was performed in accordance with this program, shall be collected, stored, and maintained in accordance with documented procedures. This documentation includes final design documents, such as drawings and specifications, and revisions thereto and documentation which identifies the important steps, including sources of design inputs that support the final design.

i. Additional details concerning design control activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

3. Design Verification

a. A program is established and implemented to verify the acceptability of design activities and documents for the design of items. The selection and incorporation of design inputs and design processes, outputs, and changes are verified.

B.3 (continued)

b. Verification methods include, but are not limited to, design reviews, alternative calculations, and qualification testing. The extent of this verification will 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. Standardized or previously proven designs will be reviewed for applicability prior to use.

c. When a test program is used to verify the acceptability of a specific design feature, the test program is to demonstrate acceptable performance under conditions that simulate the most adverse design conditions that are expected to be encountered.

d. Independent design verification is to be completed before design outputs are used by other organizations for design work and before they are used to support other activities such as procurement, manufacture, or construction. When this timing cannot be achieved, the unverified portion of the design is to be identified and controlled. In all cases, the design verification is to be completed before relying on the item to perform its function.

e. Individuals or groups responsible for design reviews or other verification activities shall be identified in 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. The designer's immediate supervisor may perform the design verification provided:

1. the supervisor is the only technically qualified individual capable of performing the verification,

2. the need is individually documented and approved in advance by the supervisor's management, and

3. the frequency and effectiveness of the supervisor's use as a design verifier are independently verified to guard against abuse.

f. Design verification procedures are to be established and implemented to ensure that an appropriate verification method is used, the appropriate design parameters to be verified are chosen, the acceptance criteria are identified, the verification is satisfactorily accomplished, and the results are properly recorded.

B.3 (continued)

g. Additional details concerning design verification activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

4. Procurement Control

a. A program is established and implemented to ensure that purchased items and services are of acceptable quality.

b. The program includes provisions for evaluating prospective suppliers and selecting only qualified suppliers.

c. The program includes provisions for ensuring that qualified suppliers continue to provide acceptable products and services.

d. The program includes provisions (e.g., source verification, receipt inspection, pre-installation and post-installation tests, and certificates of conformance) for accepting purchased items and services.

e. Applicable technical, regulatory, administrative, and reporting requirements (e.g., specifications, codes, standards, tests, inspections, special processes, and 10 CFR Part 21) are invoked for procurement of items and services.

f. The program includes provisions for ensuring that documented evidence of an item's conformance to procurement requirements is available at the site before the item is placed in service or used unless otherwise specified in procedures.

g. The program includes provisions for ensuring that procurement, inspection, and test requirements have been satisfied before an item is placed in service or used unless otherwise specified in procedures.

h. The procurement of components, including spare and replacement parts, is subject to quality and technical requirements suitable for their intended service.

i. Appropriate controls for the selection, determination of suitability for intended use (critical characteristics), evaluation, receipt, and quality evaluation of commercial grade items are to be imposed to ensure that the items will perform satisfactorily in service.

B.4. (continued)

j. Additional details concerning procurement control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.123).

5. Procurement Verification

a. A program is established and implemented to verify the quality of purchased items and services at intervals and to a depth consistent with the item's or service's importance to safety, complexity, and quantity and the frequency of procurement.

b. The program is executed in all phases of procurement. As necessary, this may require verification of activities of suppliers below the first tier.

c. Additional details concerning procurement verification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.123 and 1.144).

6. Identification and Control of Items

a. A program is established and implemented to identify and control items to prevent the use of incorrect or defective items.

b. Identification of each item is maintained throughout fabrication, erection, installation, and use so that the item can be traced to its documentation. Traceability is maintained to an extent consistent with the item's importance to safety.

c. Additional details concerning identification and control of items may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. Handling, Storage, and Shipping

a. A program is established and implemented to control the handling, storage, shipping, cleaning, and preserving of items to ensure the items maintain acceptable quality.

b. Special protective measures (e.g., containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels, and temperature levels) are specified and provided when required to maintain acceptable quality.

B.7 (continued)

c. Specific procedures are developed and used for cleaning, handling, storage, packaging, shipping, and preserving items when required to maintain acceptable quality.

d. Items are marked and labeled during packaging, shipping, handling, and storage to identify, maintain, and preserve the items' integrity and indicate the need for special controls.

e. Additional details concerning handling, storage, and shipping activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.38).

8. Test Control

a. A test control program is established and implemented to demonstrate that items will perform satisfactorily in service.

b. Criteria are defined that specify when testing is required.

c. The test control program includes, as appropriate, proof tests before installation, pre-operational tests, post-maintenance tests, post-modification tests, and operational tests.

d. Test procedures are developed that include:

1. instructions and prerequisites to perform the test,

2. use of proper test equipment,

3. acceptance criteria, and

4. mandatory inspections as required.

e. Test results are evaluated to assure that test objectives and inspection requirements have been satisfied.

f. Unacceptable test results shall be evaluated.

g. Additional details concerning test control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

B. (continued)

9. Measuring and Test Equipment Control

a. A program is established and implemented to control the calibration, maintenance, and use of measuring and test equipment. Measuring and test equipment does not include permanently installed operating equipment or test equipment used for preliminary checks where data obtained will not be used to determine acceptability or be the basis for design or engineering evaluation. Additionally, calibration and control measures are not required for rulers, tape measures, levels and other such devices if normal commercial manufacturing practices provide adequate accuracy.

b. The types of equipment covered by the program (e.g., instruments, tools, gages, and reference and transfer standards) are defined in procedures.

c. Measuring and test equipment is calibrated at specified intervals or immediately before use on the basis of the item's required accuracy, intended use, frequency of use, and stability characteristics and other conditions affecting its performance.

d. Measuring and test equipment is labeled, tagged, or otherwise controlled to indicate its calibration status and to ensure its traceability to calibration test data.

e. Measuring and test equipment is calibrated against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated or, when this is not possible, have an accuracy that ensures the equipment being calibrated will be within the required tolerance.

f. If nationally recognized standards exist, calibration standards are to be traceable to them. Except where calibration standards with the same accuracy as the instruments being calibrated are shown to be adequate for the requirements, calibration standards are to have a greater accuracy than the standards being calibrated.

g. Measuring and test equipment found out of calibration is tagged or segregated. The acceptability shall be determined of items measured, inspected, or tested with an out-of-calibration device.

B.9 (continued)

h. Additional details concerning measuring and test equipment control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.30, 1.33, 1.94, 1.116, and 1.123).

10. Inspection, Test, and Operating Status

a. The status of required inspections and tests and the operating status of items is verified before release, fabrication, receipt, installation, test, and use, as applicable. This verification is to preclude inadvertent bypassing of inspections and tests and to prevent inadvertent operation of controlled equipment.

b. The application and removal of inspection, test, and operating status indicators are controlled in accordance with procedures.

c. Additional details concerning inspection, test, and operating status control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

11. Special Process Control

a. A program is established and implemented to ensure that special processes are properly controlled.

b. The criteria that establish which processes are special are described in procedures. The following are special processes:

1. welding,

2. heat treating,

3. NDE (Non-Destructive Examination),

4. chemical cleaning, and

5. unique fabricating or testing processes which require in-process controls.

c. Special processes are accomplished by qualified personnel, using appropriate equipment, and procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

B.11 (continued)

d. Additional details concerning special process control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

12. Inspection

a. A program is established and implemented for inspections of activities in order to verify conformance to the documented instructions, procedures and drawings for accomplishing the activity. The inspection program may be implemented by or for the organization performing the activity to be inspected.

b. Provisions to ensure inspection planning is properly accomplished are to be established. Planning activities are to identify the characteristics and activities to be inspected, the inspection techniques, the acceptance criteria, and the organization responsible for performing the inspection.

c. Provisions to identify inspection hold points, beyond which work is not to proceed without the consent of the inspection organization, are to be defined.

d. Inspection results are to be documented by the inspector and reviewed by qualified personnel.

e. Unacceptable inspection results shall be evaluated and resolved in accordance with procedures.

f. Inspections are performed by qualified personnel other than those who performed or directly supervised the work being inspected. While performing the inspection activity the inspectors functionally report to the associated manager responsible for quality assurance or a manager responsible for materials, purchasing, and contracts as appropriate.

g. Additional details concerning inspections may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.58).

B. (continued)

13. Corrective Action

a. Procedures shall provide for identification, evaluation, and resolution of conditions adverse to quality.

b. Reworked, repaired, and replacement items are to be inspected and tested in accordance with the original inspection and test requirements or specified alternatives.

c. Additional details concerning corrective action activities may be found in Section A.6 and the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

14. Document Control

a. A program is established and implemented to control the development, review, approval, issue, use, and revision of documents.

b. The scope of the document control program includes:

1. safety analysis report,
2. design documents,
3. procurement documents,
4. Technical Specifications,
5. procedures, manuals, and plans,
6. corrective action documents, and
7. other documents as defined in procedures.

c. Revisions of controlled documents are reviewed for adequacy and approved for release by the same organization that originally reviewed and approved the documents or by a designated organization that is qualified and knowledgeable.

d. Copies of controlled documents are distributed to and used by the person performing the activity.

B.14 (continued)

e. The distribution of new and revised controlled documents is in accordance with procedures. Superseded documents are controlled.

f. Additional details concerning document control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

15. Records

a. A program is established and implemented to ensure that sufficient records of items and activities (e.g., design, engineering, procurement, manufacturing, construction, inspection and test, installation, pre-operation, startup, operations, maintenance, modification, decommissioning, and audits) are generated and maintained to reflect completed work.

b. The program provides provisions for the administration, receipt, storage, preservation, safekeeping, retrieval, and disposition of records.

c. Additional details concerning record requirements may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.88).

C. AUDIT

1. Methodology

a. Personnel responsible for carrying out audits are maintained cognizant of day-to-day activities by the ongoing involvement in the quality assurance program requirements so that they can act in a management advisory

C. (continued)

2. Performance

a. A program of planned and periodic audits is established and implemented to confirm that activities affecting quality comply with the QAPM and that the QAPM has been implemented effectively. Audit frequencies will be implemented as required by the applicable Code of Federal Regulations, safety analysis report, and commitments by various correspondence to the NRC. Audits will be conducted at a frequency in accordance with either Section C.2.a.1 or Section C.2.a.2 below.

1. Audit frequencies will be determined in accordance with a performance based audit scheduling program. The scheduling program, through an expert panel, uses assessment indicators to identify and schedule audits based on performance results and importance of the activity relative to safety. Potential audit subject areas are periodically assessed against appropriate performance criteria. From these reviews a determination is made in regard to the depth, scope, and scheduling of specific audits. Functional areas important to safety are assessed annually (± 25%) to identify strengths and weaknesses (if applicable) to determine the level and focus of independent oversight activities for the upcoming year. The basis for the assessment shall include the results of audits and surveillance, NRC inspections, LERs, self-assessments, and applicable conditions reports (e.g., non-conformance and corrective action reports). Personnel changes, change/increase in functional area responsibilities, industry operating experience, and INPO evaluations will also be considered. Each area will be assigned a rating with a comparison to previous years. This assessment will be documented, reviewed, and approved by quality assurance management.

This document is considered a quality assurance record and will be available for NRC review. Audit subject areas of Section C.2.a.2 shall continue to be audited on the frequencies designated unless expert panel judgment, based on performance results, determines such an audit to be unnecessary. In such cases the expert panel basis shall be documented.

C.2.a. (continued)

2. Audit schedules assure that the following areas are audited at the indicated frequencies, or more frequently as performance dictates.

   a. The conformance of each unit's operation to provisions contained within the Technical Specifications and applicable license conditions is audited at least once every 24 months.

   b. The performance, training, and qualifications of the entire staff is audited at least once every 24 months.

   c. The results of actions taken to correct deficiencies occurring in unit equipment, structure, systems, or method of operation that affect nuclear safety is audited at least once every 24 months.

   d. The performance of activities required by the QAPM to meet the criteria of 10 CFR 50, Appendix B is audited at least once every 24 months.

   e. The Offsite Dose Calculations Manual and Process Control Program and implementing procedures is audited at least once every 24 months.

   f. The radiological environmental monitoring program and the results thereof is audited at least once every 24 months.

   g. A fire protection and loss prevention program inspection and audit shall be performed using either off-site licensee personnel or an outside fire protection firm at least once 12 months.

   h. The fire protection program and implementing procedures at least once 24 months.

   i. A fire protection and loss prevention program inspection and audit shall be performed using an outside fire consultant at least once 36 months.

3. **A grace period of 90 days may be applied to the 24-month frequency for internal audits. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date."**

C.2 (continued)

b. Audits shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items and a review of documents and records, as applicable.

c. Audits shall be performed in accordance with approved written procedures or checklists. Items from previous audits shall be reviewed and reaudited, as appropriate. The checklists are used as guides to the auditor.

d. Scheduling and resource allocation are based on the status and safety importance of the activity or process being assessed.

e. Scheduling is dynamic and resources are supplemented when the effectiveness of the quality assurance program is in doubt.

f. Audit reports are written and distributed to the appropriate levels of management for review. Follow-up action, including re-look at deficient areas, is initiated as deemed appropriate.

g. Implementation of delegated portions of the quality assurance program is assessed.

h. Audits are conducted using predetermined acceptance criteria.

i. Additional details concerning audits may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.144).

D. INDEPENDENT SAFETY REVIEW

1. Description

a. Independent safety review is performed to meet the individual unit's commitment to NUREG-0737, Section I.B.1.2, "Independent Safety Engineering Group," as described in the unit's safety analysis report.

Table 1
Regulatory Commitments

A. Regulatory Guide 1.8 Revision 1, dated September 1975

		Clarification/Exception
1.	General	Qualification requirements for personnel will meet ANSI/ANS 3.1 1978 except where exception to ANSI N18.1 or to this Standard is identified in the applicable unit's Technical Specifications. Individuals filling positions who met the previous commitment at the time of implementation of this commitment can be considered to meet any more restrictive aspects of the requirements of this commitment for that position without further review and documentation.
2.	General	The following qualifications may be considered equivalent to a bachelor's degree: a. 4 years of post secondary 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. Years of experience used to meet the education requirements as allowed by this exception shall not be used to also meet the experience requirements.

Table 1
Regulatory Commitments

B. Regulatory Guide 1.30, dated August 1972

		Clarification/Exception
1.	ANSI N45.2.4 General	ANSI N45.2.4 identifies various tests to be performed. The applicability of these tests will be determined as discussed in QAPM Section B.8 and based upon the significance of change or modification.
2.	ANSI N45.2.4 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this Section.
3.	ANSI N45.2.4 Section 5.2	In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.
4.	ANSI N45.2.4 Section 6.2.1	The last sentence of this section states: "Items requiring calibration shall be tagged or labeled on completion indicating date of calibration and identity of the person that performed the calibration." Instead of requiring the tagging or labeling of all equipment this statement is changed to require the equipment to be suitably marked to indicate the date of the next required calibration and the identity of the person that performed the calibration.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 Revision 2, dated February 1978

		Clarification/Exception
1.	Section C.1	Entergy will provide procedures for the guide's Appendix A activities as discussed. However, Entergy does not consider all activities listed to be "safety-related" (e.g., activities in 7.e).
2.	Section C.4	This section establishes minimum 2 year audit frequency for all safety related functions and recommends audit frequencies specific to Corrective Action, Facility Operation, and Staff Performance, Training, and Qualifications. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
3.	ANSI N18.7 Section 1	Sentences 4 and 5 state, "However, applicable sections of this standard should be used as they apply to related activities. Activities included are: Design Changes, Purchasing, Fabricating..." With regard to radioactive material transportation activities, Entergy will only implement the requirements associated with those activities conducted in accordance with the applicable NRC Quality Assurance Program Approval for Radioactive Material Packages.
4.	ANSI N18.7 Section 4.3.1	The specific areas of experience described in this section is not applicable to the on-site safety review committee but the committee must be comprised of site operating or engineering supervisory personnel. Additionally, the off-site safety review committee need contain experience in only a majority of the areas.
5.	ANSI N18.7 Section 4.3.2.3	The statement that "no more than a minority of the quorum shall have line responsibility for the operation of the plant" is not applicable to the on-site safety review committee.
6.	ANSI N18.7 Section 4.3.4(2)	Reviews associated with changes to the technical specifications will be performed in accordance with Section 4.3.4(3) instead of this section.

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
7.	ANSI N18.7 Section 4.3.4(3)	Revision to proposed Technical Specification changes only require review in accordance with this section when the revision involves a significant change to the technical basis for the proposed change.
8.	ANSI N18.7 Section 4.3.4(4)	In place of the requirements of this section, the on-site and off-site safety review committees shall review facility operations to detect potential nuclear safety hazards and all reports made in accordance with 10 CFR 50.73.
9.	ANSI N18.7 Section 4.3.4(5)	Examples of the matters reviewed by the on-site safety review committee in accordance with this section are the following: a. new and revised station administrative procedures and b. changes to the Emergency Plan (except editorial changes).
10.	ANSI N18.7 Section 4.5	This section establishes minimum 2 year audit frequency for all safety related functions. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
11.	ANSI N18.7 Section 4.5	The independent review body discussed in this section is the off-site safety review committee.
12.	ANSI N18.7 Section 5.1	Instead of the requirements of this section to have a summary document, a method of cross referencing these requirements to the implementing procedures will be maintained.
13.	ANSI N18.7 Section 5.2.2	The person who holds a senior reactor operators license for the affected unit and approves a temporary change to a procedure is not required to be in charge of the shift.

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
14.	ANSI N18.7 Section 5.2.2	In addition to the temporary procedure change process described for changes which clearly do not change the intent of a procedure, temporary procedure changes which may change the intent of a procedure may be made following the process described in this section. Except that the person normally responsible for approving revisions to the procedure is the approval authority for the change.
15.	ANSI N18.7 Section 5.2.6	Instead of the requirements of this section concerning non-conforming conditions, non-conforming conditions will be evaluated and controlled in accordance with the corrective action program.
16.	ANSI N18.7 Section 5.2.6	The requirement of the fifth paragraph of this section to have a log of the status of temporary modifications is not applicable to temporary modifications for routine tasks installed in accordance with procedures. These procedures shall provide assurance that approvals are obtained, temporary modification activities are independently verified by an individual cognizant of the purpose and the effect of the temporary modification, and that activities are adequately documented to indicate the status of the temporary modification.
17.	ANSI N18.7 Section 5.2.7.1	This section will be implemented by adding the words "Where practical" in front of the first and fourth sentences of the fifth paragraph. For modifications where the requirements of the fourth sentence are not considered practical, a review in accordance with the provisions of 10 CFR 50.59 will be conducted.
18.	ANSI N18.7 Section 5.2.8	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.	ANSI N18.7 Section 5.2.9	The requirements of the Physical Security Plan shall be implemented in place of these general requirements.

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
20.	ANSI N18.7 Section 5.2.13.1	Consistent with ANSI N45.2.11 Section 7.2, minor changes to documents, such as inconsequential editorial corrections, or changes to commercial terms and conditions may not require that the revised document receive the same review and approval as the original documents.
21.	ANSI N18.7 Section 5.2.14	Where marking, tagging, or physical separation of the non-conforming item is not feasible, the non-conforming item may be controlled by the use of appropriate documentation.
22.	ANSI N18.7 Section 5.2.15	Required procedure reviews following the occurrences discussed in Section 5.2.15, paragraph 3, sentence 3, are determined and controlled in accordance with the QAPM Section A.6 instead of this section.
23.	ANSI N18.7 Section 5.2.15	This section requires plant procedure review by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. Instead of this review, controls are in effect to ensure that procedures are reviewed for possible revision upon identification of new or revised source material potentially affecting the intent of procedures.
24.	ANSI N18.7 Section 5.3.9	Instead of the requirements of this section, the format and content of the emergency operating procedures follow the applicable NRC approved format for the specific unit.
25.	ANSI N18.7 Section 5.3.9.3	Entergy's NRC accepted Emergency Plan will be implemented in lieu of the requirements in this section.

Table 1
Regulatory Commitments

D. Regulatory Guide 1.37, dated March 1973

		Clarification/Exception
1.	General	Instead of using the cleanliness level classification system of ANSI N45.2.1, the required cleanliness for specific items and activities is addressed on a case-by-case basis. Cleanliness is maintained, consistent with the work being performed to prevent introduction of foreign material. As a minimum, cleanliness inspections are performed prior to system closure and such inspections are documented.
2.	Section C.3	The water quality for final flushes of fluid systems and associated components is at least equivalent to the quality of the operating system water, except for the oxygen and nitrogen content.
3.	Section C.4	As an alternate to the requirements of this section, contamination levels in expendable products may be based upon safe practices and industrial availability with documented engineering evaluations. Contaminant levels are controlled such that subsequent removal by standard cleaning methods results in the achievement of final acceptable levels which are not detrimental to the materials.
4.	ANSI N45.2.1 Section 5	Any nonhalogenated material may be used which is compatible with the parent material not just plastic film.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 Revision 2, dated May 1977

		Clarification/Exception
1.	ANSI N45.2.2 Section 3.2	Storage of an item in a higher level storage area meets the lower level storage requirements.
2.	ANSI N45.2.2 Section 3.2	As an alternate to the requirements in Section 3.2.1 items (4), (5), and 7, Section 3.2.2, Section 3.2.3 item (1), and Section 3.2.4 item (2), the storage atmosphere may be controlled such that it is free of harmful contaminants in concentration that could produce damage to the stored item and protecting weld end preparations and threads by controlling the manner in which the item is stored.
3.	ANSI N45.2.2 Section 3.7.1	Cleated, sheathed boxes may be used up to 1000 lb. rather than 500 lb. as specified in 3.7.1(1). Special qualification testing may be required for loads over 1000 lb.
4.	ANSI N45.2.2 Section 3.7.2	Skids and runners will normally be fabricated from a minimum 2 X 4 inch nominal lumber size 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.
5.	ANSI N45.2.2 Section 4.3.4	Inspections of packages and/or preservative coatings are made immediately prior to loading rather than after loading.
6.	ANSI N45.2.2 Section 5.2.1	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. 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 provides adequate documentation of completion of the shipping damage inspection. Any non-conformances noted will be documented and dispositioned. Persons performing the visual scrutiny during unloading are not considered to be performing an inspection function as defined under Reg. Guide 1.74; therefore, while they will be trained to perform this function, they may not be certified (N45.2.6) as an inspector.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
7.	ANSI N45.2.2 Section 5.2.2	The second division of this subsection requires six additional inspection activities if an item was not inspected or examined at the source. Entergy 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). Instead of the requirement that receiving inspections be performed in an area equivalent to the level of storage required for the item, receiving inspections will be performed in a manner and in an environment which does not endanger the requisite quality of an item. The receiving inspection's location environmental controls may be less stringent than storage environmental requirements for that item; however, the short time spent in the less stringent receiving inspection area shall be of such duration that it will not adversely affect the item being received.
8.	ANSI N45.2.2 Section 5.2.3	The "Special Inspection" procedure is not required to be attached to the item or container but shall be readily available to inspection personnel.
9.	ANSI N45.2.2 Section 6.2.1	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 may not be provided.
10.	ANSI N45.2.2 Section 6.2.4	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."

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
11.	ANSI N45.2.2 Section 6.2.5	The sentence is replaced with the following: " Exterminators or other appropriate measures shall be used to control animals to minimize possible contamination and mechanical damage to stored material. If evidence of animal activity is detected, a survey or inspection will be utilized to determine the extent of the damage."
12.	ANSI N45.2.2 Section 6.3.3	An alternate to the stated requirement is 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."
13.	ANSI N45.2.2 Section 6.4.2	Care of items in storage shall be exercised in accordance with the following: "Types of components that could require maintenance while in storage shall be identified and evaluated for specific maintenance requirements. Maintenance activities 6.4.2 (6) through 6.4.2 (8) listed in this requirement shall be considered during this evaluation and any deviations shall be justified and documented."
14.	ANSI N45.2.2 Section 6.5	The last sentence of this section is not applicable to the operations phase.
15.	ANSI N45.2.2 Section 6.6	Entergy will comply with this section's requirements with the clarification that, for record purposes, only the access of personnel without key cards into indoor storage areas shall be recorded. Unloading or pickup of material shall not be considered "access," nor shall inspection by NRC or other regulatory agents, nor shall tours by nonlicensee employees who are accompanied by licensee employees.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
16.	ANSI N45.2.2 Section 7.3	Re-rating hoisting equipment will be considered only when 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 and the test lift load. At all times, the codes governing re-rating of hoisting equipment must be observed.
17.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.1	During printing of the standard, a transposition occurred between the last sentence of A3.4.1(4) and A3.4.1(5). The correct requirements are: (4) "However, preservatives for inaccessible inside surfaces of pumps, valves and pipe systems containing reactor coolant water shall be the water flushable type." (5) "The name of the preservative used shall be indicated to facilitate touch up."
18.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.2	There may be cases involving large or complex shaped items for which an inert or dry air purge is provided, rather than a static gas blanket, in order to provide adequate protection due to difficulty of providing a leak proof barrier. In these cases, a positive pressure purge flow may be utilized as an alternate to a leakproof barrier.
19.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.1	Instead of the requirement for non-metallic plugs and caps to be brightly colored, non-metallic plugs and caps shall be an appropriately visible color.
20.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.2	This paragraph limits halogen and sulfur content of tape. The use of tapes containing greater amounts of halogens than those identified will be allowed after appropriate evaluation; however, the quantities shall not be such that harmful concentrations could be leached or released by breakdown of the compounds under expected environmental conditions.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38(continued)

		Clarification/Exception
21.	ANSI N45.2.2 Appendix (A-3) Section A.3.7.1	In lieu of A3.7.1(3) and (4), Entergy will comply with the following: Fiberboard boxes shall be securely closed either with a water resistant adhesive applied to the entire area of contact between the flaps, or all seams and joints shall be sealed with not less than 2-inch wide, water resistant tape.
22.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	Instead of the requirement that container markings appear on a minimum of two sides of the container, preferably on one side and one end, Entergy will comply with the following: Containers are adequately marked for storage, identification, and retrieval. Multiple marking requirements are imposed, where necessary.
23.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the requirement that container markings be no less than 3/4" high, Entergy will comply with the following: Container markings are of a size which permits easy recognition.
24.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the specific container marking requirements, Entergy will comply with the following: The information required in container marking is evaluated on a case-by-case basis.
25.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	The last paragraph of A.3.9 could be interpreted as prohibiting any direct marking on bare austenitic stainless steel and nickel alloy metal surfaces. As a alternate, paragraphs A.3.9.(1) and (2) may be used to control marking on the surface of austenitic stainless steels and nickel base alloys based on documented engineering evaluations. Contamination levels are controlled such that the material used for marking is not detrimental to the materials marked.

Table 1
Regulatory Commitments

F. Regulatory Guide 1.39 Revision 2, dated September 1977

		Clarification/Exception
1.	ANSI N45.2.3 General	The ANSI five level zone designation system may not be utilized, but the intent of the standard will be met for the areas of housekeeping, plant and personnel safety, and fire protection.
2.	ANSI N45.2.3 Section 3.1	This section is not applicable.
3.	ANSI N45.2.3 Section 3.2.3	The Fire Protection Program shall be used in lieu of the general requirements in this section.
4.	ANSI N45.2.3 Section 3.3	The first paragraph is not applicable to the operations phase.
5.	ANSI N45.2.3 Section 3.4	This section is not applicable.
6.	ANSI N45.2.3 Section 3.5	Subparagraph (1) is not applicable to the operations phase; (2), (3), and (4) will be implemented.

Table 1
Regulatory Commitments

G. Regulatory Guide 1.58 Revision 1, dated September 1980

		Clarification/Exception
1.	General	Entergy 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 the Technical Specifications or other QAPM commitment requirements.
2.	General	Certification of inspectors in accordance with this guide is approved by a manager responsible for quality assurance except for inspectors performing inspections as part of the procurement process. These inspectors may be approved by a manager responsible for materials, purchasing, and contracts.
3.	ANSI N45.2.6 Section 1.2	Paragraph 4 requires that the standard be imposed on personnel other than licensee employees; the applicability of this standard to suppliers will be documented and applied, as appropriate, in procurement documents for such suppliers.
4.	ANSI N45.2.6 Section 1.2	The requirements of this standard do not apply to personnel using later editions of ASNT contained within 10CFR50.55a approved ASME editions or addenda.
5.	ANSI N45.2.6 Section 2.3	**This section requires, in part, that any person who has not performed inspection, examination, or testing activities in his qualified area for a period of one year shall be re-evaluated. A 90-day grace period may be applied to this activity. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date.**
6.	ANSI N45.2.6 Section 2.5	This section's requirements are clarified 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, none are considered necessary.
7.	ANSI N45.2.6 Section 3.5	Entergy reserves the right to use personnel who do not meet these experience requirements but have shown capability through training and testing or capability demonstration.

Table 1
Regulatory Commitments

H. Regulatory Guide 1.64 Revision 2, dated June 1976

		Clarification/Exception
1.	ANSI N45.2.11 Section 5.2.4	For the documentation of inter-disciplinary design reviews, there must be documented evidence of the acceptability of design documents, or portions thereof, prior to release (material, stress, physics, mechanical, electrical, concrete, etc.). Indication of the positive concurrence of those who determine the design acceptability relative to their respective disciplinary area of concern should be on the document or on a separate form traceable to the document. A document that indicates the reviewer's comments need not be retained.

Table 1
Regulatory Commitments

I. Regulatory Guide 1.74, dated February 1974

		Clarification/Exception
1.	ANSI N45.2.10, Section 2	Definitions for "Certificate of Conformance" and "Certificate of Compliance" will be exchanged based upon the guidance in ANSI N45.2.13 Section 10.2.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

Clarification/Exception

1.	RG 1.88 Section C	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of N45.2.9 Section 5.6 or the discussions in this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.
2.	ANSI N45.2.9 Section 1.4	Documents are considered completed when they are "completely filled out" (i.e., when sufficient information is recorded to fulfill the record's intended purpose) and the adequacy of the document (e.g., legibility) has been accepted by the document control or records management organizations or designees.
3.	ANSI N45.2.9 Section 3.2.2	The requirements for an index discussed in this section are considered to only require that a method of retrieving the record and controlling the identified information be established.
4.	ANSI N45.2.9 Section 5.4.2	Instead of the requirements of this section, Entergy will comply with the following: Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers. Methods other than binders, folders, or envelopes (e.g., dividers or boxes) may be used to organize records for storage. This section is not applicable to special processed records controlled in accordance with Section 5.4.3 when the requirements of this section are not appropriate for the record type.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

		Clarification/Exception
5.	ANSI N45.2.9 Section 5.4.3	Instead of the requirements of this section, Entergy will comply with the following: 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 with appropriate consideration of packaging and storing recommendations as provided by the manufacturer of these materials.
6.	ANSI N45.2.9 Section 5.5	Routine general office and nuclear site security systems and access controls are provided; no special security systems are required to be established for record storage areas.
7.	ANSI N45.2.9 Section 5.6	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 Revision 1, dated April 1976

		Clarification/Exception
1.	ANSI N45.2.5 Section 2.5.2	The last sentence requires that all items inspected with maintenance and test equipment which is found to be out of calibration shall be considered unacceptable. Entergy will comply with QAPM Section B.9.g as an alternate. QAPM Section B.9.g requires an evaluation to determine the validity of previous measurements.
2.	ANSI N45.2.5 Section 4.5	When using ACI-305-72 and ACI-306-66, Entergy may apply the following requirements: PLACING TEMPERATURES OF CONCRETE A. During hot weather concreting, placing temperatures of concrete will be limited to the following: 1) Concrete members less than 3 feet in least dimension will not exceed 90°F; 2) Concrete members from 3 feet to 6 feet in least dimension will not exceed 70°F; and 3) Concrete members more than 6 feet in least dimension will have placing temperature as near 50°F as can be obtained by use of ice as necessary up to 100 percent of adding mixing water; and by shading aggregate and sprinkling the coarse aggregate the day it is to be used. Care will be taken so that no unmelted ice remains in the concrete at the end of the mixing period. B. During cold weather concreting: In heating the water and aggregate, live steam to heat the fine and coarse aggregate shall not be used. The permissible range for concrete temperature shall be as follows: 1) Sections less than 3 feet in least dimensions 55°F to 75°F; and 2) Mass concrete 3 feet or more in least dimension 45°F to 65°F. The mixing water and aggregate will be purchased as required. The materials will be free of ice, snow and frozen lumps before they enter the mixer.
3.	ANSI N45.2.5 Table B	As an alternate to daily testing grout for compressive strength, for prepackaged shelf item, non-shrink grout, the grout's compressive strength tests may be performed once on each batch of non-shrink grout received, rather than each day grout is placed.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 Revision 1, dated April 1976

Clarification/Exception

4. ANSI N45.2.5 Section 4.8

For the performance of correlation tests, the requirements of this standard may be modified as discussed below:

Table B, REINFORCING STEEL: In-process testing of reinforcing steel will include the mechanical properties of yield strength, tensile strength and percent elongation on full size specimens for each bar size for each 50 tons or fraction thereof from each mill heat. Bend tests are performed during material qualification testing only, except as noted below for bar sizes #14 through #18.

Table A, "Required Qualification Tests" as applied to reinforcing steel will include bend tests as required by ASTM A615 and summarized in the following: a) For bar sizes #3 through #11, one full size specimen from largest bar size rolled from each mill heat, unless material from one heat differs by three or more designation numbers. When this occurs, one bend test shall be made from both the highest and lowest designation number of the deformed bars rolled; b) For bar sizes #14 through #18, Supplementary Requirements S1 of ASTM A615 will be applied, i.e., one fullsize specimen for each bar size for each mill heat. If supplementary requirements are not followed for mill tests, they will be applied as in-process tests.

In-process test specimens may be selected at the rebar fabrication shop, prior to start of fabrication of the rebar from the heat or fraction thereof represented by the test specimen.

Acceptance criteria for any failed test (qualifications as well as in-process) may be the same as that for tensile tests specified in Subarticle CC-2331.2 of ASME Section III, Div. 2 Code (1975). This states that if a test specimen fails to meet the specified strength requirements, two (2) additional specimens from the same heat and of the same bar size would be tested, and if either of the two additional specimens fails to meet the specified strength requirements, the material represented by the tests would be rejected for the specified use. Alternative use of rejected material under strict control may be subject to evaluation by engineering.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 (continued)

		Clarification/Exception
5.	ANSI N45.2.5 Section 4.9	Entergy may interpret the terms "horizontal, vertical and diagonal bars" to apply respectively to the following types of splice positions: a. Horizontal, including 10° to horizontal; b. Vertical, including 10° to vertical; and c. 45° angle, including 10° to 80° angle. The words "splicing crew" are interpreted to refer to all project members that are actively engaged in preparing and assembling cadweld mechanical splices at the final splice location. Separate test cycles will be established for each bar size and each splice position.
6.	ANSI N45.2.5 Section 5.5	Entergy will comply with inspection requirements of the applicable welding codes and any exceptions instead of this section.

Table 1
Regulatory Commitments

L. Regulatory Guide 1.116 Revision 0-R, dated June 1976

		Clarification/Exception
1.	ANSI N45.2.8 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 Revision 1, dated July 1977

		Clarification/Exception
1.	RG 1.123 Paragraph C.6.e	This paragraph shall be implemented as originally written in N45.2.13 (i.e., with the verb "should" instead of the verb "shall"). Entergy retains the ultimate responsibility for performance of purchased equipment. The appropriate engineering discipline will exercise this management/engineering prerogative with respect to the final decision on post installation test requirements.
2.	ANSI N45.2.13 Section 1.2.2	Item c is an option which may be used to assure quality; however, any option given in 10 CFR 50 Appendix B, Criterion VII as implemented by the QAPM may also be used.
3.	ANSI N45.2.13 Section 1.3	Instead of the definition provided for QA Program Requirements, Entergy will comply with the following: "Those individual requirements of the QAPM which, when invoked in total or in part, establish quality assurance program requirements for the activity being controlled. Although not specifically used in the QAPM, ANSI N45.2 may be imposed upon suppliers."
4.	ANSI N45.2.13 Section 3.1	The "same degree of control" is stipulated to mean "equivalent level of review and approval." The changed document may not always be reviewed by the originator; however, at least an equivalent level of management/supervision shall review and approve any changes.
5.	ANSI N45.2.13 Section 3.1	Changes to procurement documents which are changes in quantity, estimated price, cost codes, taxes, format or editorial changes that do not affect the quality of the item or service do not require an equivalent level of review and approval as the original document.
6.	ANSI N45.2.13 Section 3.4	The requirements of the QAPM will be implemented instead of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 (continued)

		Clarification/Exception
7.	ANSI N45.2.13 Section 4.2	Supplier evaluations may be performed any time prior to placing the purchased item in service.
8.	ANSI N45.2.13 Section 8.2 Item b	Non-conformance notices for conditions described in this section are only required to be submitted to Entergy when the non-conformance could adversely affect the end use of an item relative to safety, interchangeability, operability, reliability, integrity or maintainability.
9.	ANSI N45.2.13 Section 10.2 Item d	The section states that the certificate should be attested to by a person who is responsible for this QA function whose function and position are described in the Purchaser's/Supplier's QA program. As an alternate to this requirement, Entergy will use the following: "The person attesting to a certificate shall be an authorized and responsible employee of the supplier, and shall be identified by the supplier."

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980

		Clarification/Exception
1.	RG 1.144 Section C.3.a.(2)	This section is not applicable.
2.	RG 1.144 Section C.3.b.(2)	In addition to the requirements of this section, previously evaluated and approved active suppliers for which auditing is not the selected method of source verification should be evaluated concurrent with the award of a contract. Regardless of the evaluation results, active suppliers (except those excluded under C.3.b(1)) are source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed. Inactive suppliers are evaluated prior to supplying items or services. An audit shall be conducted if required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or another method allowable under 10 CFR 50 Appendix B, Criterion VII).
3.	RG 1.144 Section C.3.b.(2)	**This section requires that supplier audits be performed on a triennial basis. A 90-day grace period may be applied to this activity. For activities deferred in accordance with the 90-day grace period, the next performance date will be based on their originally scheduled date.**
4.	RG 1.144 Section C.3.b.(2)	Instead of the annual documented evaluation of suppliers discussed in this section, an ongoing evaluation of supplier performance is conducted which takes into account, where applicable, the other considerations of this section and paragraph of the Regulatory Guide.
5.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
6.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 (continued)

		Clarification/Exception
7.	ANSI N45.2.12 Section 4.3.2.2	This subsection 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. Entergy will comply with an alternate sentence which reads: "When available, objective evidence shall be examined for compliance with QAPM requirements. If subjective evidence is used (e.g., personnel interviews) then the audit report must indicate how the evidence was obtained."
8.	ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.
9.	ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
10.	ANSI N45.2.12 Section 4.4	Instead of the last sentence of the last paragraph of the section, Entergy will comply with the following: The audit report shall be issued within thirty working days after the last day of the audit. The last day of an audit shall be considered to be the day of the post-audit conference. If a post-audit conference is not held because it was deemed unnecessary, the last day of the audit shall be considered to be the date the post-audit conference was deemed unnecessary as documented in the audit report.
11.	ANSI N45.2.12 Section 4.5.1	The QAPM Section A.6 corrective action program may be used instead of these requirements as long as the appropriate time limits are applied to significant conditions adverse to quality. Also, no additional documentation is necessary if needed corrective actions are taken and verified prior to audit report issuance.

Table 1
Regulatory Commitments

O. Regulatory Guide 1.146 Revision 0, dated August 1980

		Clarification/Exception
1.	ANSI N45.2.23 Section 2.3.1.3	Holders of NRC-issued Reactor Operator/Senior Reactor Operator Licenses comply with the requirements of this section and may be awarded two credits.
2.	ANSI N45.2.23 Section 2.3.4	Prospective lead auditors shall demonstrate their ability to effectively implement the audit process and lead an audit team. They shall have participated in at least one audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively lead audits, licensee management may designate a prospective lead auditor as a "lead auditor".
3.	**ANSI N45.2.23 Sections 3.2 and 5.3**	**These sections require that an annual assessment be performed of each lead auditor's qualification and that each lead auditor's records be updated annually. A 90-day grace period may be applied to these activities. For activities deferred in accordance with the 90-day grace period, the next performance due date will be based on their originally scheduled date.**

QAPM Revision 2

Package Contains:

50.54(a) Evaluation Documentation

Revision 2

QAPM Revision 2
50.54(a) Evaluation Documentation

See attached:
Document 1) removes Attachment 1 of the QAPM, i.e. ANO Specific Requirements
Document 2) removes plant engineering from a direct reporting relationship to the plant managers.
Document 3) removes Material Requirements (MR) from Material, Purchasing and Contracts (MP&C) and places MR reporting to the Director.

Document 1

Quality Assurance Program Manual
Change Review Form

Proposed change: see attachment

10CFR50.54 Review:

1. Does the proposed change represent a reduction of commitment to the QA Program description previously accepted by the NRC? ☐ Yes ☒ No

Explain:
see attachment

2. If item 1 above is YES, does the proposed change include the basis to conclude that the revised program incorporating the change continues to meet the criteria of 10CFR50, Appendix B and other previously accepted FSAR commitments? ☐ Yes ☐ No ☒ N/A

Explain: Not applicable based on 1. above

Preparer/Date: see attachment

Reviewer/Date:

RECOMMENDATION:

☒ Does not represent a lessening of commitment, and it can be implemented immediately.

☐ Represents a lessening of commitment, however, the change has sufficient basis to demonstrate continued compliance with Appendix B and other FSAR commitments. Therefore, it should be submitted to the NRC for acceptance prior to implementation.

☐ Represents a lessening of commitment with insufficient basis to determine continued compliance. Therefore the change should not be processed.

Recommended By /Date:

DISPOSITION:

☒ Approved for implementation ☐ Disapproved

☐ Approved for submittal to the NRC for acceptance

Approved By:
Vice President, Operations Support (or assigned designee) Date: 9/3/99

Quality Assurance Program Manual
10CFR50.54(a)(3)

Change
Revision 1 to the EOI Quality Assurance Program Manual (QAPM) added Attachment 1. This attachment contained ANO organization details as required by ANO's Technical Specifications. Revision 2 to the QAPM removes Attachment 1 of the QAPM.

Reason for Change
As stated in the referenced 50.54, Attachment 1 was added to the QAPM to maintain compliance with the ANO Technical Specifications (Units 1&2) until submitted Technical Specification changes were approved upon which Attachment 1 to the QAPM would be removed.

NRC approval has been obtained for the ANO Technical Specification amendment. This amendment was approved August 26, 1999 and is documented to file as CNA09910.

Justification (basis for change)
This change is necessary to bring the QAPM into alignment with current site Technical Specifications. The change removes Attachment 1 and references to Attachment 1 only, and does not impact the body of the approved QAPM.

Document 2

Quality Assurance Program Manual
Change Review Form

Proposed change:
see attachment

10CFR50.54 Review:

1. Does the proposed change represent a reduction of commitment to the QA Program description previously accepted by the NRC? ☐ Yes ☑ ~~No~~

Explain:
see attachment

2. If item 1 above is YES, does the proposed change include the basis to conclude that the revised program incorporating the change continues to meet the criteria of 10CFR50, Appendix B and other previously accepted FSAR commitments? ☐ Yes ☐ No ☑ ~~N~~/A

Explain: Not applicable based on 1. above

Preparer/Date: see attachment

Reviewer/Date:

RECOMMENDATION:

☑ Does not represent a lessening of commitment, and it can be implemented immediately.

☐ Represents a lessening of commitment, however, the change has sufficient basis to demonstrate continued compliance with Appendix B and other FSAR commitments. Therefore, it should be submitted to the NRC for acceptance prior to implementation.

☐ Represents a lessening of commitment with insufficient basis to determine continued compliance. Therefore the change should not be processed.

Recommended By /Date: Wes Garner June 23, 1999

DISPOSITION:

☑ Approved for implementation ☐ Disapproved

☐ Approved for submittal to the NRC for acceptance

Approved By: [signature] 8/12/99
Vice President, Operations Support (or assigned designee) WEE Date:

Quality Assurance Program Manual
10CFR50.54(a)(3)

Current QAPM Section A.2.d.2: The manager responsible for plant operations assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. The functional responsibility includes:

a. chemistry,
b. operations,
c. maintenance,
d. radiological protection,
e. plant engineering,
f. implementation of design activities,
g. work control,
h. tests,
i. on-site safety review committee, and
j. maintenance of the plant in conformance with approved design.

Change

Proposed Change: This change provides for organizational alignment of all engineering groups (design, plant, system or other site applied terms), and reporting of these engineering functions to the Vice President, Engineering. Subsection e, plant engineering, will be deleted from Section A.2.d.2 and the subsections following subsection e. will be re-lettered.

Reason for Change

To allow organizational alignment of all engineering functions

Justification:

10CFR50.54, Conditions of Licenses, states in part: In addition to quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, the following changes are not considered to be reductions in commitment:

iii) The use of generic organizational position titles that clearly denote the position function supplemented as necessary by descriptive text, rather than specific titles;

vi) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

Based on the above, the changes do not involve a reduction in commitment because the position functions remain specified in the QAPM and in procedures.

Document 3

Quality Assurance Program Manual
Change Review Form

Proposed change:
see attachment

10CFR50.54 Review:

1. Does the proposed change represent a reduction of commitment to the QA Program description previously accepted by the NRC? ☐ Yes ☑ No

Explain:
see attachment

2. If item 1 above is YES, does the proposed change include the basis to conclude that the revised program incorporating the change continues to meet the criteria of 10CFR50, Appendix B and other previously accepted FSAR commitments? ☐ Yes ☐ No ☑ N/A

Explain: Not applicable based on 1. above

Preparer/Date: see attachment

Reviewer/Date:

RECOMMENDATION:

☑ Does not represent a lessening of commitment, and it can be implemented immediately.

☐ Represents a lessening of commitment, however, the change has sufficient basis to demonstrate continued compliance with Appendix B and other FSAR commitments. Therefore, it should be submitted to the NRC for acceptance prior to implementation.

☐ Represents a lessening of commitment with insufficient basis to determine continued compliance. Therefore the change should not be processed.

Recommended By /Date:

DISPOSITION:

☑ Approved for implementation ☐ Disapproved

☐ Approved for submittal to the NRC for acceptance

Approved By:
Vice President, Operations Support (or assigned designee) Date: 9/2/99

Quality Assurance Program Manual
10CFR50.54(a)(3)

Change

Current QAPM Section A.2.d.9 included for reference: The manager responsible for materials, purchasing, and contracts is responsible for supplier evaluations, source verifications, procurement, services, receipt, storage, and issue of materials, parts, and components. Different aspects of these responsibilities (e.g., source verification) may be fulfilled by separate managers.

Proposed Change: QAPM Section A.2.d.9 is changed to state: The manager responsible for materials, purchasing, and contracts is responsible for procurement, services, receipt, storage, and issue of materials, parts and components. Different aspects of these responsibilities may be fulfilled by separate managers.

Proposed Change: QAPM Section A.2.d.1: (Change in italics)
The manager responsible for quality assurance has overall authority and responsibility for establishing, controlling, and verifying the implementation and adequacy of the quality assurance program as described in this QAPM ***including activities related to vendor quality.*** The manager responsible for quality assurance has the authority and responsibility to escalate matters directly to the chief executive officer when needed.

Reason for Change

To allow organizational alignment of the vendor quality function.

Justification:

10CFR50.54, Conditions of Licenses, states in part: In addition to quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, the following changes are not considered to be reductions in commitment:

iii) The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles;

vi) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

Based on the above, the changes clearly do not involve a reduction in commitment because the position functions remain specified in the QAPM and in procedures.

The proposed change does not conflict with previous approval of having a separate supplier QA organization located offsite. It actually enhances the independence of the QA function previously performed by MR as a part of the MP&C organization.

The proposed organizational change continues to ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and

organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. This is provided by the independent reporting relationship of the proposed QA organization. The authority to identify and implement the Quality Assurance program, escalate matters to appropriate levels of management, and the authority to stop unsatisfactory work remains in tact and in accordance with the QAPM.

Therefore, the proposed change does not involve or cause any reduction in commitment and can be implemented as a change to the QAPM.

Prepared by: **Wes Garner** WAGarner **Date 6/9/99**

Independent Review: Provided by site QA groups **Date:**

ANO Director Nuclear Safety: **Date:**

GGNS Director, Quality **Date:**

RBS Manager, Quality **Date:**

WF3 Director, Quality **Date:**

Echelon Director NS&L **Date:**

QAPM Revision 2
(including marked up text)

Mark up
Rev 2

Quality Assurance Program Manual

Arkansas Nuclear One
Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

River Bend Station
Docket No. 50-458
License No. NPF-47

Waterford 3 Steam Electric Station
Docket No. 50-382
License No. NPF-38

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A. MANAGEMENT

1. Methodology

a. The Quality Assurance Program Manual (QAPM) provides a consolidated overview of the quality program controls which govern the operation and maintenance of Entergy Operations, Inc.'s (Entergy's) quality related items and activities. The QAPM describes the quality assurance organizational structure, functional responsibilities, levels of authority, and interfaces.

b. The requirements and commitments contained in the QAPM are mandatory and must be implemented, enforced, and adhered to by all individuals and organizations. Employees are encouraged to actively participate in the continued development of the QAPM as well as its implementation. Changes should be promptly communicated when identified.

c. The QAPM applies to all activities associated with structures, systems, and components which are safety related or controlled by 10 CFR 72. The QAPM also applies to transportation packages controlled by 10 CFR 71. The methods of implementation of the requirements of the QAPM are commensurate with the ~~item's~~item or activity's importance to safety. The applicability of the requirements of the QAPM to other items and activities is determined on a case-by-case basis. The QAPM implements 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

d. The QAPM is implemented through the use of approved procedures (i.e., policies, directives, procedures, instructions, or other documents) which provide written guidance for the control of quality related activities and provide for the development of documentation to provide objective evidence of compliance.

2. Organization

The organizational structure responsible for implementation of the QAPM is described below. The specific organization titles for the quality assurance functions described are identified in procedures. The authority to accomplish the quality assurance functions described is delegated to the incumbent's staff as necessary to fulfill the identified responsibility~~. ANO specific details can be found in Attachment 1.~~

A.2 (continued)

a. The chief executive officer is responsible for providing top level direction of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief executive officer provides guidance with regards to company quality assurance policy.

b. The chief operating officer reports to the chief executive officer and is responsible for the implementation of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief operating officer provides guidance with regards to company quality assurance policy.

c. The following executives report to the chief operating officer:

1. The executive responsible for overall plant nuclear safety at each site is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program at the respective site and overseeing activities of the associated off-site safety review committee.

2. The executive responsible for operations support is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program of Entergy's corporate activities and maintaining this QAPM in accordance with regulatory requirements.

3. The executive responsible for engineering is responsible for providing engineering services.

d. The individuals fulfilling the following management functions report to the executives identified above. These individuals may report through an additional layer of management but shall maintain sufficient authority and organizational freedom to implement the assigned responsibilities. These individuals may be responsible for a single unit/location or for multiple units/locations and may fulfill more than one function described below:

1. The manager responsible for quality assurance has overall authority and responsibility for establishing, controlling, and verifying the implementation and adequacy of the quality assurance program as described in this QAPM <u>including activities related to vendor quality</u>. The manager responsible for quality assurance has the authority and responsibility to escalate matters directly to the chief executive officer when needed.

A.2.d (continued)

2. The manager responsible for plant operations assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. The functional responsibility includes:

   a. chemistry,
   b. operations,
   c. maintenance,
   d. radiological protection,
   ~~e. plant engineering,~~
   ~~f.~~ e implementation of design activities,
   ~~g~~ f. work control,
   ~~h.~~g. tests,
   ~~i~~ h. on-site safety review committee, and
   ~~j.~~ i. maintenance of the plant in conformance with approved design.

3. The manager responsible for plant modification provides direction, control, and overall supervision of the implementation of plant modifications and assigned maintenance. Separate managers may be responsible for different modification activities.

4. The manager responsible for training provides direction, control, and overall supervision of all training of personnel required by regulations.

5. The manager responsible for records management provides direction, control, and overall supervision of the records management program and associated activities.

6. The manager responsible for document control provides direction, control, and overall supervision of the document control program and associated activities.

7. The manager responsible for the corrective action program provides direction, control, and overall supervision of the corrective action program and associated activities.

8. The manager responsible for engineering is responsible for the development and maintenance of engineering programs, policies, and procedures and for providing engineering services. Different aspects of these responsibilities (e.g., fuel design) may be fulfilled by separate managers.

A.2.d (continued)

9. The manager responsible for materials, purchasing, and contracts is responsible for ~~supplier evaluations, source verifications,~~ procurement, services, receipt, storage, and issue of materials, parts, and components. Different aspects of these responsibilities ~~(e.g., source verification)~~ may be fulfilled by separate managers.

e. The on-site and off-site safety review committees independently review activities to provide additional assurance that the units are operated and maintained in accordance with the Operating License and applicable regulations which address nuclear safety.

3. Responsibility

a. Entergy has the responsibility for the scope and implementation of an effective quality assurance program.

b. Entergy may delegate all or part of the activities of planning, establishing, and implementing the quality assurance program to others, but retains the responsibility for the program's effectiveness.

c. The adequacy of the QAPM's implementation is assessed annually by the manager(s) responsible for quality assurance and reported to the chief executive officer and the associated executive for overall plant nuclear safety.

d. Entergy is responsible for ensuring that the applicable portion(s) of the quality assurance program is properly documented, approved, and implemented (people are trained and resources are available) before an activity within the scope of the QAPM is undertaken by Entergy or by others.

e. Individual managers are to ensure that personnel working under their management cognizance are provided the necessary training and resources to accomplish their assigned tasks within the scope of the QAPM.

f. Procedures that implement the QAPM are approved by the management responsible for the applicable quality function. These procedures are to reflect the QAPM and work is to be accomplished in accordance with them.

A. (continued)

4. Authority

a. When Entergy delegates responsibility for planning, establishing, or implementing any part of the overall QA program, sufficient authority to accomplish the assigned responsibilities is delegated.

b. The manager responsible for quality assurance has the responsibility and the authority to stop unsatisfactory work and control further processing, delivery, installation, or use of non-conforming items or services. Cost and schedule considerations will not override safety considerations.

5. Personnel Training and Qualification

a. Personnel assigned to implement elements of the quality assurance program are capable of performing their assigned tasks.

b. Training programs are established and implemented to ensure that personnel achieve and maintain suitable proficiency.

c. Personnel training and qualification records are maintained in accordance with procedures.

d. Additional details concerning Personnel Training and Qualification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.8, 1.58, and 1.146).

6. Corrective Action

a. It is the responsibility of each individual to promptly identify and report conditions adverse to quality. Management at all levels encourages the identification of conditions that are adverse to quality.

b. A corrective action program is established and implemented that includes prompt identification, documentation, and correction of conditions adverse to quality. The corrective action program for significant conditions adverse to quality shall require cause determination (when possible) and a corrective action plan that should lessen the likelihood of the recurrence.

A.6 (continued)

c. Specific responsibilities within the corrective action program may be delegated, but Entergy maintains responsibility for the program's effectiveness.

d. Non-conforming items are properly controlled to prevent their inadvertent test, installation, or use. They are reviewed and either accepted, rejected, repaired, or reworked.

e. Reports of conditions that are adverse to quality are analyzed to identify trends in quality performance. Significant conditions adverse to quality and significant trends are reported to the appropriate level of management.

f. Additional details concerning corrective action activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. **Regulatory Commitments**

a. Except where alternatives are identified, Entergy complies with the QA guidance documents listed on Table 1. If the guidance in one of these documents is in conflict with the QAPM, the guidance provided in the QAPM is the controlling guidance. Additionally, the following clarifications apply to all guidance documents listed in Table 1:

1. For modifications and nonroutine maintenance, guidance applicable to construction-like activities is applicable to comparable plant activities. Except that the inspection of modifications, repairs, rework, and replacements shall be in accordance with the original design and inspection requirements or a documented approved alternative.

2. The definitions provided by Regulatory Guide 1.74 and associated clarifications as described in Table 1 apply wherever the defined term is used in the QAPM and associated guidance documents.

3. Clarification to a guidance document applies wherever the guidance document is invoked.

A.7.a (continued)

4. In each of the ANSI standards, other documents (e.g., other standards, codes, regulations, tables, or appendices) are referenced or described. These other documents are only quality assurance program requirements if explicitly committed to in the QAPM. If not explicitly committed to, these documents are not considered as quality assurance program requirements, although they may be used as guidance.

5. Guidance applicable to safety related items and activities is applicable to comparable items and activities controlled by 10 CFR 72 and transportation packages controlled by 10 CFR 71.

b. The NRC is to be notified of QAPM changes in accordance with 10 CFR 50.54(a)(3).

B. PERFORMANCE/VERIFICATION

1. Methodology

a. Personnel performing work activities such as design, engineering, procurement, manufacturing, construction, installation, startup, maintenance, modification, operation, and decommissioning are responsible for achieving acceptable quality.

b. Personnel performing verification activities are responsible for verifying the achievement of acceptable quality and are different personnel than those who performed the work.

c. Work is accomplished and verified using instructions, procedures, or other appropriate means that are of a detail commensurate with the activity's complexity and importance to safety.

d. Criteria that define acceptable quality are specified, and quality is verified against these criteria.

2. Design Control

a. The design control program is established and implemented to assure that the activities associated with the design of systems, components, structures, and equipment and modifications thereto, are executed in a planned, controlled, and orderly manner.

B.2 (continued)

b. The program includes provisions to control design inputs, processes, outputs, changes, interfaces, records, and organizational interfaces.

c. Design inputs (e.g., performance, regulatory, quality, and quality verification requirements) are to be correctly translated into design outputs (e.g., specifications, drawings, procedures, and instructions).

d. The final design output is to relate to the design input in sufficient detail to permit verification.

e. The design process is to ensure that items and activities are selected and independently verified consistent with their importance to safety to ensure they are suitable for their intended application.

f. Changes to final designs (including field changes and modifications) and dispositions of non-conforming items to either use-as-is or repair are to be subjected to design control measures commensurate with those applied to the original design and approved by the organization that performed the original design or a qualified designee.

g. Interface controls (internal and external between participating design organizations and across technical disciplines) for the purpose of developing, reviewing, approving, releasing, distributing, and revising design inputs and outputs are defined in procedures.

h. Design documentation and records, which provide evidence that the design and design verification process was performed in accordance with this program, shall be collected, stored, and maintained in accordance with documented procedures. This documentation includes final design documents, such as drawings and specifications, and revisions thereto and documentation which identifies the important steps, including sources of design inputs that support the final design.

i. Additional details concerning design control activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

3. **Design Verification**

a. A program is established and implemented to verify the acceptability of design activities and documents for the design of items. The selection and incorporation of design inputs and design processes, outputs, and changes are verified.

B.3 (continued)

b. Verification methods include, but are not limited to, design reviews, alternative calculations, and qualification testing. The extent of this verification will 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. Standardized or previously proven designs will be reviewed for applicability prior to use.

c. When a test program is used to verify the acceptability of a specific design feature, the test program is to demonstrate acceptable performance under conditions that simulate the most adverse design conditions that are expected to be encountered.

d. Independent design verification is to be completed before design outputs are used by other organizations for design work and before they are used to support other activities such as procurement, manufacture, or construction. When this timing cannot be achieved, the unverified portion of the design is to be identified and controlled. In all cases, the design verification is to be completed before relying on the item to perform its function.

e. Individuals or groups responsible for design reviews or other verification activities shall be identified in 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. The designer's immediate supervisor may perform the design verification provided:

1. the supervisor is the only technically qualified individual capable of performing the verification,

2. the need is individually documented and approved in advance by the supervisor's management, and

3. the frequency and effectiveness of the supervisor's use as a design verifier are independently verified to guard against abuse.

f. Design verification procedures are to be established and implemented to ensure that an appropriate verification method is used, the appropriate design parameters to be verified are chosen, the acceptance criteria are identified, the verification is satisfactorily accomplished, and the results are properly recorded.

B.3 (continued)

g. Additional details concerning design verification activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

4. Procurement Control

a. A program is established and implemented to ensure that purchased items and services are of acceptable quality.

b. The program includes provisions for evaluating prospective suppliers and selecting only qualified suppliers.

c. The program includes provisions for ensuring that qualified suppliers continue to provide acceptable products and services.

d. The program includes provisions (e.g., source verification, receipt inspection, pre-installation and post-installation tests, and certificates of conformance) for accepting purchased items and services.

e. Applicable technical, regulatory, administrative, and reporting requirements (e.g., specifications, codes, standards, tests, inspections, special processes, and 10 CFR Part 21) are invoked for procurement of items and services.

f. The program includes provisions for ensuring that documented evidence of an item's conformance to procurement requirements is available at the site before the item is placed in service or used unless otherwise specified in procedures.

g. The program includes provisions for ensuring that procurement, inspection, and test requirements have been satisfied before an item is placed in service or used unless otherwise specified in procedures.

h. The procurement of components, including spare and replacement parts, is subject to quality and technical requirements suitable for their intended service.

i. Appropriate controls for the selection, determination of suitability for intended use (critical characteristics), evaluation, receipt, and quality evaluation of commercial grade items are to be imposed to ensure that the items will perform satisfactorily in service.

B.4. (continued)

j. Additional details concerning procurement control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.123).

5. **Procurement Verification**

a. A program is established and implemented to verify the quality of purchased items and services at intervals and to a depth consistent with the item's or service's importance to safety, complexity, and quantity and the frequency of procurement.

b. The program is executed in all phases of procurement. As necessary, this may require verification of activities of suppliers below the first tier.

c. Additional details concerning procurement verification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.123 and 1.144).

6. **Identification and Control of Items**

a. A program is established and implemented to identify and control items to prevent the use of incorrect or defective items.

b. Identification of each item is maintained throughout fabrication, erection, installation, and use so that the item can be traced to its documentation. Traceability is maintained to an extent consistent with the item's importance to safety.

c. Additional details concerning identification and control of items may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. **Handling, Storage, and Shipping**

a. A program is established and implemented to control the handling, storage, shipping, cleaning, and preserving of items to ensure the items maintain acceptable quality.

b. Special protective measures (e.g., containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels, and temperature levels) are specified and provided when required to maintain acceptable quality.

B.7 (continued)

c. Specific procedures are developed and used for cleaning, handling, storage, packaging, shipping, and preserving items when required to maintain acceptable quality.

d. Items are marked and labeled during packaging, shipping, handling, and storage to identify, maintain, and preserve the items' integrity and indicate the need for special controls.

e. Additional details concerning handling, storage, and shipping activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.38).

8. Test Control

a. A test control program is established and implemented to demonstrate that items will perform satisfactorily in service.

b. Criteria are defined that specify when testing is required.

c. The test control program includes, as appropriate, proof tests before installation, pre-operational tests, post-maintenance tests, post-modification tests, and operational tests.

d. Test procedures are developed that include:

1. instructions and prerequisites to perform the test,

2. use of proper test equipment,

3. acceptance criteria, and

4. mandatory inspections as required.

e. Test results are evaluated to assure that test objectives and inspection requirements have been satisfied.

f. Unacceptable test results shall be evaluated.

g. Additional details concerning test control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

B. (continued)

9. Measuring and Test Equipment Control

a. A program is established and implemented to control the calibration, maintenance, and use of measuring and test equipment. Measuring and test equipment does not include permanently installed operating equipment or test equipment used for preliminary checks where data obtained will not be used to determine acceptability or be the basis for design or engineering evaluation. Additionally, calibration and control measures are not required for rulers, tape measures, levels and other such devices if normal commercial manufacturing practices provide adequate accuracy.

b. The types of equipment covered by the program (e.g., instruments, tools, gages, and reference and transfer standards) are defined in procedures.

c. Measuring and test equipment is calibrated at specified intervals or immediately before use on the basis of the item's required accuracy, intended use, frequency of use, and stability characteristics and other conditions affecting its performance.

d. Measuring and test equipment is labeled, tagged, or otherwise controlled to indicate its calibration status and to ensure its traceability to calibration test data.

e. Measuring and test equipment is calibrated against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated or, when this is not possible, have an accuracy that ensures the equipment being calibrated will be within the required tolerance.

f. If nationally recognized standards exist, calibration standards are to be traceable to them. Except where calibration standards with the same accuracy as the instruments being calibrated are shown to be adequate for the requirements, calibration standards are to have a greater accuracy than the standards being calibrated.

g. Measuring and test equipment found out of calibration is tagged or segregated. The acceptability shall be determined of items measured, inspected, or tested with an out-of-calibration device.

B.9 (continued)

h. Additional details concerning measuring and test equipment control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.30, 1.33, 1.94, 1.116, and 1.123).

10. Inspection, Test, and Operating Status

a. The status of required inspections and tests and the operating status of items is verified before release, fabrication, receipt, installation, test, and use, as applicable. This verification is to preclude inadvertent bypassing of inspections and tests and to prevent inadvertent operation of controlled equipment.

b. The application and removal of inspection, test, and operating status indicators are controlled in accordance with procedures.

c. Additional details concerning inspection, test, and operating status control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

11. Special Process Control

a. A program is established and implemented to ensure that special processes are properly controlled.

b. The criteria that establish which processes are special are described in procedures. The following are special processes:

1. welding,

2. heat treating,

3. NDE (Non-Destructive Examination),

4. chemical cleaning, and

5. unique fabricating or testing processes which require in-process controls.

c. Special processes are accomplished by qualified personnel, using appropriate equipment, and procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

B.11 (continued)

d. Additional details concerning special process control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

12. Inspection

a. A program is established and implemented for inspections of activities in order to verify conformance to the documented instructions, procedures and drawings for accomplishing the activity. The inspection program may be implemented by or for the organization performing the activity to be inspected.

b. Provisions to ensure inspection planning is properly accomplished are to be established. Planning activities are to identify the characteristics and activities to be inspected, the inspection techniques, the acceptance criteria, and the organization responsible for performing the inspection.

c. Provisions to identify inspection hold points, beyond which work is not to proceed without the consent of the inspection organization, are to be defined.

d. Inspection results are to be documented by the inspector and reviewed by qualified personnel.

e. Unacceptable inspection results shall be evaluated and resolved in accordance with procedures.

f. Inspections are performed by qualified personnel other than those who performed or directly supervised the work being inspected. While performing the inspection activity the inspectors functionally report to the associated manager responsible for quality assurance or a manager responsible for materials, purchasing, and contracts as appropriate.

g. Additional details concerning inspections may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.58).

B. (continued)

13. Corrective Action

a. Procedures shall provide for identification, evaluation, and resolution of conditions adverse to quality.

b. Reworked, repaired, and replacement items are to be inspected and tested in accordance with the original inspection and test requirements or specified alternatives.

c. Additional details concerning corrective action activities may be found in Section A.6 and the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

14. Document Control

a. A program is established and implemented to control the development, review, approval, issue, use, and revision of documents.

b. The scope of the document control program includes:

1. safety analysis report,
2. design documents,
3. procurement documents,
4. Technical Specifications,
5. procedures, manuals, and plans,
6. corrective action documents, and
7. other documents as defined in procedures.

c. Revisions of controlled documents are reviewed for adequacy and approved for release by the same organization that originally reviewed and approved the documents or by a designated organization that is qualified and knowledgeable.

d. Copies of controlled documents are distributed to and used by the person performing the activity.

B.14 (continued)

e. The distribution of new and revised controlled documents is in accordance with procedures. Superseded documents are controlled.

f. Additional details concerning document control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

15. Records

a. A program is established and implemented to ensure that sufficient records of items and activities (e.g., design, engineering, procurement, manufacturing, construction, inspection and test, installation, pre-operation, startup, operations, maintenance, modification, decommissioning, and audits) are generated and maintained to reflect completed work.

b. The program provides provisions for the administration, receipt, storage, preservation, safekeeping, retrieval, and disposition of records.

c. Additional details concerning record requirements may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.88).

C. AUDIT

1. Methodology

a. Personnel responsible for carrying out audits are maintained cognizant of day-to-day activities by the ongoing involvement in the quality assurance program requirements so that they can act in a management advisory function.

b. Organizations performing audits are to be technically and performance oriented commensurate with the activity being reviewed.

c. Personnel performing audits have no direct responsibilities in the area they are assessing.

d. Audits are accomplished using instructions, procedures, or other appropriate means that are of a detail commensurate with the activity's complexity and importance to safety.

C. (continued)

2. Performance

a. A program of planned and periodic audits is established and implemented to confirm that activities affecting quality comply with the QAPM and that the QAPM has been implemented effectively. Audit frequencies will be implemented as required by the applicable Code of Federal Regulations, safety analysis report, and commitments by various correspondence to the NRC. Audits will be conducted at a frequency in accordance with either Section C.2.a.1 or Section C.2.a.2 below.

1. Audit frequencies will be determined in accordance with a performance based audit scheduling program. The scheduling program, through an expert panel, uses assessment indicators to identify and schedule audits based on performance results and importance of the activity relative to safety. Potential audit subject areas are periodically assessed against appropriate performance criteria. From these reviews a determination is made in regard to the depth, scope, and scheduling of specific audits. Functional areas important to safety are assessed annually (± 25%) to identify strengths and weaknesses (if applicable) to determine the level and focus of independent oversight activities for the upcoming year. The basis for the assessment shall include the results of audits and surveillance, NRC inspections, LERs, self-assessments, and applicable conditions reports (e.g., non-conformance and corrective action reports). Personnel changes, change/increase in functional area responsibilities, industry operating experience, and INPO evaluations will also be considered. Each area will be assigned a rating with a comparison to previous years. This assessment will be documented, reviewed, and approved by quality assurance management.

This document is considered a quality assurance record and will be available for NRC review. Audit subject areas of Section C.2.a.2 shall continue to be audited on the frequencies designated unless expert panel judgment, based on performance results, determines such an audit to be unnecessary. In such cases the expert panel basis shall be documented.

C.2.a. (continued)

2. Audit schedules assure that the following areas are audited at the indicated frequencies, or more frequently as performance dictates.

   a. The conformance of each unit's operation to provisions contained within the Technical Specifications and applicable license conditions is audited at least once every 24 months.

   b. The performance, training, and qualifications of the entire staff is audited at least once every 24 months.

   c. The results of actions taken to correct deficiencies occurring in unit equipment, structure, systems, or method of operation that affect nuclear safety is audited at least once every 24 months.

   d. The performance of activities required by the QAPM to meet the criteria of 10 CFR 50, Appendix B is audited at least once every 24 months.

   e. The Offsite Dose Calculations Manual and Process Control Program and implementing procedures is audited at least once every 24 months.

   f. The radiological environmental monitoring program and the results thereof is audited at least once every 24 months.

   g. A fire protection and loss prevention program inspection and audit shall be performed using either off-site licensee personnel or an outside fire protection firm at least once 12 months.

   h. The fire protection program and implementing procedures at least once 24 months.

   i. A fire protection and loss prevention program inspection and audit shall be performed using an outside fire consultant at least once 36 months.

b. Audits shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items and a review of documents and records, as applicable.

C.2 (continued)

c. Audits shall be performed in accordance with approved written procedures or checklists. Items from previous audits shall be reviewed and reaudited, as appropriate. The checklists are used as guides to the auditor.

d. Scheduling and resource allocation are based on the status and safety importance of the activity or process being assessed.

e. Scheduling is dynamic and resources are supplemented when the effectiveness of the quality assurance program is in doubt.

f. Audit reports are written and distributed to the appropriate levels of management for review. Follow-up action, including re-look at deficient areas, is initiated as deemed appropriate.

g. Implementation of delegated portions of the quality assurance program is assessed.

h. Audits are conducted using predetermined acceptance criteria.

i. Additional details concerning audits may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.144).

D. INDEPENDENT SAFETY REVIEW

1. Description

a. Independent safety review is performed to meet the individual unit's commitment to NUREG-0737, Section I.B.1.2, "Independent Safety Engineering Group," as described in the unit's safety analysis report.

Table 1
Regulatory Commitments

A. Regulatory Guide 1.8 Revision 1, dated September 1975

	Clarification/Exception
1. General	Qualification requirements for personnel will meet ANSI/ANS 3.1 1978 except where exception to ANSI N18.1 or to this Standard is identified in the applicable unit's Technical Specifications. Individuals filling positions who met the previous commitment at the time of implementation of this commitment can be considered to meet any more restrictive aspects of the requirements of this commitment for that position without further review and documentation.
2. General	The following qualifications may be considered equivalent to a bachelor's degree: a. 4 years of post secondary 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. Years of experience used to meet the education requirements as allowed by this exception shall not be used to also meet the experience requirements.

Table 1
Regulatory Commitments

B. **Regulatory Guide 1.30, dated August 1972**

		Clarification/Exception
1.	ANSI N45.2.4 General	ANSI N45.2.4 identifies various tests to be performed. The applicability of these tests will be determined as discussed in QAPM Section B.8 and based upon the significance of change or modification.
2.	ANSI N45.2.4 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this Section.
3.	ANSI N45.2.4 Section 5.2	In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.
4.	ANSI N45.2.4 Section 6.2.1	The last sentence of this section states: "Items requiring calibration shall be tagged or labeled on completion indicating date of calibration and identity of the person that performed the calibration." Instead of requiring the tagging or labeling of all equipment this statement is changed to require the equipment to be suitably marked to indicate the date of the next required calibration and the identity of the person that performed the calibration.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 Revision 2, dated February 1978

		Clarification/Exception
1.	Section C.1	Entergy will provide procedures for the guide's Appendix A activities as discussed. However, Entergy does not consider all activities listed to be "safety-related" (e.g., activities in 7.e).
2.	Section C.4	This section establishes minimum 2 year audit frequency for all safety related functions and recommends audit frequencies specific to Corrective Action, Facility Operation, and Staff Performance, Training, and Qualifications. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
3.	ANSI N18.7 Section 1	Sentences 4 and 5 state, "However, applicable sections of this standard should be used as they apply to related activities. Activities included are: Design Changes, Purchasing, Fabricating..." With regard to radioactive material transportation activities, Entergy will only implement the requirements associated with those activities conducted in accordance with the applicable NRC Quality Assurance Program Approval for Radioactive Material Packages.
4.	ANSI N18.7 Section 4.3.1	The specific areas of experience described in this section is not applicable to the on-site safety review committee but the committee must be comprised of site operating or engineering supervisory personnel. Additionally, the off-site safety review committee need contain experience in only a majority of the areas.
5.	ANSI N18.7 Section 4.3.2.3	The statement that "no more than a minority of the quorum shall have line responsibility for the operation of the plant" is not applicable to the on-site safety review committee.
6.	ANSI N18.7 Section 4.3.4(2)	Reviews associated with changes to the technical specifications will be performed in accordance with Section 4.3.4(3) instead of this section.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
7.	ANSI N18.7 Section 4.3.4(3)	Revision to proposed Technical Specification changes only require review in accordance with this section when the revision involves a significant change to the technical basis for the proposed change.
8.	ANSI N18.7 Section 4.3.4(4)	In place of the requirements of this section, the on-site and off-site safety review committees shall review facility operations to detect potential nuclear safety hazards and all reports made in accordance with 10 CFR 50.73.
9.	ANSI N18.7 Section 4.3.4(5)	Examples of the matters reviewed by the on-site safety review committee in accordance with this section are the following: a. new and revised station administrative procedures and b. changes to the Emergency Plan (except editorial changes).
10.	ANSI N18.7 Section 4.5	This section establishes minimum 2 year audit frequency for all safety related functions. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
11.	ANSI N18.7 Section 4.5	The independent review body discussed in this section is the off-site safety review committee.
12.	ANSI N18.7 Section 5.1	Instead of the requirements of this section to have a summary document, a method of cross referencing these requirements to the implementing procedures will be maintained.
13.	ANSI N18.7 Section 5.2.2	The person who holds a senior reactor operators license for the affected unit and approves a temporary change to a procedure is not required to be in charge of the shift.

Table 1
Regulatory Commitments

C. **Regulatory Guide 1.33 (continued)**

		Clarification/Exception
14.	ANSI N18.7 Section 5.2.2	In addition to the temporary procedure change process described for changes which clearly do not change the intent of a procedure, temporary procedure changes which may change the intent of a procedure may be made following the process described in this section. Except that the person normally responsible for approving revisions to the procedure is the approval authority for the change.
15.	ANSI N18.7 Section 5.2.6	Instead of the requirements of this section concerning non-conforming conditions, non-conforming conditions will be evaluated and controlled in accordance with the corrective action program.
16.	ANSI N18.7 Section 5.2.6	The requirement of the fifth paragraph of this section to have a log of the status of temporary modifications is not applicable to temporary modifications for routine tasks installed in accordance with procedures. These procedures shall provide assurance that approvals are obtained, temporary modification activities are independently verified by an individual cognizant of the purpose and the effect of the temporary modification, and that activities are adequately documented to indicate the status of the temporary modification.
17.	ANSI N18.7 Section 5.2.7.1	This section will be implemented by adding the words "Where practical" in front of the first and fourth sentences of the fifth paragraph. For modifications where the requirements of the fourth sentence are not considered practical, a review in accordance with the provisions of 10 CFR 50.59 will be conducted.
18.	ANSI N18.7 Section 5.2.8	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.	ANSI N18.7 Section 5.2.9	The requirements of the Physical Security Plan shall be implemented in place of these general requirements.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
20.	ANSI N18.7 Section 5.2.13.1	Consistent with ANSI N45.2.11 Section 7.2, minor changes to documents, such as inconsequential editorial corrections, or changes to commercial terms and conditions may not require that the revised document receive the same review and approval as the original documents.
21.	ANSI N18.7 Section 5.2.14	Where marking, tagging, or physical separation of the non-conforming item is not feasible, the non-conforming item may be controlled by the use of appropriate documentation.
22.	ANSI N18.7 Section 5.2.15	Required procedure reviews following the occurrences discussed in Section 5.2.15, paragraph 3, sentence 3, are determined and controlled in accordance with the QAPM Section A.6 instead of this section.
23.	ANSI N18.7 Section 5.2.15	This section requires plant procedure review by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. Instead of this review, controls are in effect to ensure that procedures are reviewed for possible revision upon identification of new or revised source material potentially affecting the intent of procedures.
24.	ANSI N18.7 Section 5.3.9	Instead of the requirements of this section, the format and content of the emergency operating procedures follow the applicable NRC approved format for the specific unit.
25.	ANSI N18.7 Section 5.3.9.3	Entergy's NRC accepted Emergency Plan will be implemented in lieu of the requirements in this section.

Table 1
Regulatory Commitments

D. Regulatory Guide 1.37, dated March 1973

	Clarification/Exception
1. General	Instead of using the cleanliness level classification system of ANSI N45.2.1, the required cleanliness for specific items and activities is addressed on a case-by-case basis. Cleanliness is maintained, consistent with the work being performed to prevent introduction of foreign material. As a minimum, cleanliness inspections are performed prior to system closure and such inspections are documented.
2. Section C.3	The water quality for final flushes of fluid systems and associated components is at least equivalent to the quality of the operating system water, except for the oxygen and nitrogen content.
3. Section C.4	As an alternate to the requirements of this section, contamination levels in expendable products may be based upon safe practices and industrial availability with documented engineering evaluations. Contaminant levels are controlled such that subsequent removal by standard cleaning methods results in the achievement of final acceptable levels which are not detrimental to the materials.
4. ANSI N45.2.1 Section 5	Any nonhalogenated material may be used which is compatible with the parent material not just plastic film.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 Revision 2, dated May 1977

	Clarification/Exception
1. ANSI N45.2.2 Section 3.2	Storage of an item in a higher level storage area meets the lower level storage requirements.
2. ANSI N45.2.2 Section 3.2	As an alternate to the requirements in Section 3.2.1 items (4), (5), and 7, Section 3.2.2, Section 3.2.3 item (1), and Section 3.2.4 item (2), the storage atmosphere may be controlled such that it is free of harmful contaminants in concentration that could produce damage to the stored item and protecting weld end preparations and threads by controlling the manner in which the item is stored.
3. ANSI N45.2.2 Section 3.7.1	Cleated, sheathed boxes may be used up to 1000 lb. rather than 500 lb. as specified in 3.7.1(1). Special qualification testing may be required for loads over 1000 lb.
4. ANSI N45.2.2 Section 3.7.2	Skids and runners will normally be fabricated from a minimum 2 X 4 inch nominal lumber size 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.
5. ANSI N45.2.2 Section 4.3.4	Inspections of packages and/or preservative coatings are made immediately prior to loading rather than after loading.
6. ANSI N45.2.2 Section 5.2.1	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. 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 provides adequate documentation of completion of the shipping damage inspection. Any non-conformances noted will be documented and dispositioned. Persons performing the visual scrutiny during unloading are not considered to be performing an inspection function as defined under Reg. Guide 1.74; therefore, while they will be trained to perform this function, they may not be certified (N45.2.6) as an inspector.

Table 1
Regulatory Commitments

E. **Regulatory Guide 1.38 (continued)**

		Clarification/Exception
7.	ANSI N45.2.2 Section 5.2.2	The second division of this subsection requires six additional inspection activities if an item was not inspected or examined at the source. Entergy 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). Instead of the requirement that receiving inspections be performed in an area equivalent to the level of storage required for the item, receiving inspections will be performed in a manner and in an environment which does not endanger the requisite quality of an item. The receiving inspection's location environmental controls may be less stringent than storage environmental requirements for that item; however, the short time spent in the less stringent receiving inspection area shall be of such duration that it will not adversely affect the item being received.
8.	ANSI N45.2.2 Section 5.2.3	The "Special Inspection" procedure is not required to be attached to the item or container but shall be readily available to inspection personnel.
9.	ANSI N45.2.2 Section 6.2.1	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 may not be provided.
10.	ANSI N45.2.2 Section 6.2.4	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."

Table 1
Regulatory Commitments

E. **Regulatory Guide 1.38 (continued)**

		Clarification/Exception
11.	ANSI N45.2.2 Section 6.2.5	The sentence is replaced with the following: " Exterminators or other appropriate measures shall be used to control animals to minimize possible contamination and mechanical damage to stored material. If evidence of animal activity is detected, a survey or inspection will be utilized to determine the extent of the damage."
12.	ANSI N45.2.2 Section 6.3.3	An alternate to the stated requirement is 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."
13.	ANSI N45.2.2 Section 6.4.2	Care of items in storage shall be exercised in accordance with the following: "Types of components that could require maintenance while in storage shall be identified and evaluated for specific maintenance requirements. Maintenance activities 6.4.2 (6) through 6.4.2 (8) listed in this requirement shall be considered during this evaluation and any deviations shall be justified and documented."
14.	ANSI N45.2.2 Section 6.5	The last sentence of this section is not applicable to the operations phase.
15.	ANSI N45.2.2 Section 6.6	Entergy will comply with this section's requirements with the clarification that, for record purposes, only the access of personnel without key cards into indoor storage areas shall be recorded. Unloading or pickup of material shall not be considered "access," nor shall inspection by NRC or other regulatory agents, nor shall tours by nonlicensee employees who are accompanied by licensee employees.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
16.	ANSI N45.2.2 Section 7.3	Re-rating hoisting equipment will be considered only when 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 and the test lift load. At all times, the codes governing re-rating of hoisting equipment must be observed.
17.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.1	During printing of the standard, a transposition occurred between the last sentence of A3.4.1(4) and A3.4.1(5). The correct requirements are: (4) "However, preservatives for inaccessible inside surfaces of pumps, valves and pipe systems containing reactor coolant water shall be the water flushable type." (5) "The name of the preservative used shall be indicated to facilitate touch up."
18.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.2	There may be cases involving large or complex shaped items for which an inert or dry air purge is provided, rather than a static gas blanket, in order to provide adequate protection due to difficulty of providing a leak proof barrier. In these cases, a positive pressure purge flow may be utilized as an alternate to a leakproof barrier.
19.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.1	Instead of the requirement for non-metallic plugs and caps to be brightly colored, non-metallic plugs and caps shall be an appropriately visible color.
20.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.2	This paragraph limits halogen and sulfur content of tape. The use of tapes containing greater amounts of halogens than those identified will be allowed after appropriate evaluation; however, the quantities shall not be such that harmful concentrations could be leached or released by breakdown of the compounds under expected environmental conditions.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38(continued)

		Clarification/Exception
21.	ANSI N45.2.2 Appendix (A-3) Section A.3.7.1	In lieu of A3.7.1(3) and (4), Entergy will comply with the following: Fiberboard boxes shall be securely closed either with a water resistant adhesive applied to the entire area of contact between the flaps, or all seams and joints shall be sealed with not less than 2-inch wide, water resistant tape.
22.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	Instead of the requirement that container markings appear on a minimum of two sides of the container, preferably on one side and one end, Entergy will comply with the following: Containers are adequately marked for storage, identification, and retrieval. Multiple marking requirements are imposed, where necessary.
23.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the requirement that container markings be no less than 3/4" high, Entergy will comply with the following: Container markings are of a size which permits easy recognition.
24.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the specific container marking requirements, Entergy will comply with the following: The information required in container marking is evaluated on a case-by-case basis.
25.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	The last paragraph of A.3.9 could be interpreted as prohibiting any direct marking on bare austenitic stainless steel and nickel alloy metal surfaces. As a alternate, paragraphs A.3.9.(1) and (2) may be used to control marking on the surface of austenitic stainless steels and nickel base alloys based on documented engineering evaluations. Contamination levels are controlled such that the material used for marking is not detrimental to the materials marked.

Table 1
Regulatory Commitments

F. Regulatory Guide 1.39 Revision 2, dated September 1977

		Clarification/Exception
1.	ANSI N45.2.3 General	The ANSI five level zone designation system may not be utilized, but the intent of the standard will be met for the areas of housekeeping, plant and personnel safety, and fire protection.
2.	ANSI N45.2.3 Section 3.1	This section is not applicable.
3.	ANSI N45.2.3 Section 3.2.3	The Fire Protection Program shall be used in lieu of the general requirements in this section.
4.	ANSI N45.2.3 Section 3.3	The first paragraph is not applicable to the operations phase.
5.	ANSI N45.2.3 Section 3.4	This section is not applicable.
6.	ANSI N45.2.3 Section 3.5	Subparagraph (1) is not applicable to the operations phase; (2), (3), and (4) will be implemented.

Table 1
Regulatory Commitments

G. Regulatory Guide 1.58 Revision 1, dated September 1980

		Clarification/Exception
1.	General	Entergy 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 the Technical Specifications or other QAPM commitment requirements.
2.	General	Certification of inspectors in accordance with this guide is approved by a manager responsible for quality assurance except for inspectors performing inspections as part of the procurement process. These inspectors may be approved by a manager responsible for materials, purchasing, and contracts.
3.	ANSI N45.2.6 Section 1.2	Paragraph 4 requires that the standard be imposed on personnel other than licensee employees; the applicability of this standard to suppliers will be documented and applied, as appropriate, in procurement documents for such suppliers.
4.	ANSI N45.2.6 Section 1.2	The requirements of this standard do not apply to personnel using later editions of ASNT contained within 10CFR50.55a approved ASME editions or addenda.
5.	ANSI N45.2.6 Section 2.5	This section's requirements are clarified 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, none are considered necessary.
6.	ANSI N45.2.6 Section 3.5	Entergy reserves the right to use personnel who do not meet these experience requirements but have shown capability through training and testing or capability demonstration.

Table 1
Regulatory Commitments

H. Regulatory Guide 1.64 Revision 2, dated June 1976

	Clarification/Exception
1. ANSI N45.2.11 Section 5.2.4	For the documentation of inter-disciplinary design reviews, there must be documented evidence of the acceptability of design documents, or portions thereof, prior to release (material, stress, physics, mechanical, electrical, concrete, etc.). Indication of the positive concurrence of those who determine the design acceptability relative to their respective disciplinary area of concern should be on the document or on a separate form traceable to the document. A document that indicates the reviewer's comments need not be retained.

Table 1
Regulatory Commitments

I. Regulatory Guide 1.74, dated February 1974

		Clarification/Exception
1.	ANSI N45.2.10, Section 2	Definitions for "Certificate of Conformance" and "Certificate of Compliance" will be exchanged based upon the guidance in ANSI N45.2.13 Section 10.2.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

		Clarification/Exception
1.	RG 1.88 Section C	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of N45.2.9 Section 5.6 or the discussions in this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.
2.	ANSI N45.2.9 Section 1.4	Documents are considered completed when they are "completely filled out" (i.e., when sufficient information is recorded to fulfill the record's intended purpose) and the adequacy of the document (e.g., legibility) has been accepted by the document control or records management organizations or designees.
3.	ANSI N45.2.9 Section 3.2.2	The requirements for an index discussed in this section are considered to only require that a method of retrieving the record and controlling the identified information be established.
4.	ANSI N45.2.9 Section 5.4.2	Instead of the requirements of this section, Entergy will comply with the following: Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers. Methods other than binders, folders, or envelopes (e.g., dividers or boxes) may be used to organize records for storage. This section is not applicable to special processed records controlled in accordance with Section 5.4.3 when the requirements of this section are not appropriate for the record type.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

	Clarification/Exception
5. ANSI N45.2.9 Section 5.4.3	Instead of the requirements of this section, Entergy will comply with the following: 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 with appropriate consideration of packaging and storing recommendations as provided by the manufacturer of these materials.
6. ANSI N45.2.9 Section 5.5	Routine general office and nuclear site security systems and access controls are provided; no special security systems are required to be established for record storage areas.
7. ANSI N45.2.9 Section 5.6	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 Revision 1, dated April 1976

		Clarification/Exception
1.	ANSI N45.2.5 Section 2.5.2	The last sentence requires that all items inspected with maintenance and test equipment which is found to be out of calibration shall be considered unacceptable. Entergy will comply with QAPM Section B.9.g as an alternate. QAPM Section B.9.g requires an evaluation to determine the validity of previous measurements.
2.	ANSI N45.2.5 Section 4.5	When using ACI-305-72 and ACI-306-66, Entergy may apply the following requirements: PLACING TEMPERATURES OF CONCRETE A. During hot weather concreting, placing temperatures of concrete will be limited to the following: 1) Concrete members less than 3 feet in least dimension will not exceed 90°F; 2) Concrete members from 3 feet to 6 feet in least dimension will not exceed 70°F; and 3) Concrete members more than 6 feet in least dimension will have placing temperature as near 50°F as can be obtained by use of ice as necessary up to 100 percent of adding mixing water; and by shading aggregate and sprinkling the coarse aggregate the day it is to be used. Care will be taken so that no unmelted ice remains in the concrete at the end of the mixing period. B. During cold weather concreting: In heating the water and aggregate, live steam to heat the fine and coarse aggregate shall not be used. The permissible range for concrete temperature shall be as follows: 1) Sections less than 3 feet in least dimensions 55°F to 75°F; and 2) Mass concrete 3 feet or more in least dimension 45°F to 65°F. The mixing water and aggregate will be purchased as required. The materials will be free of ice, snow and frozen lumps before they enter the mixer.
3.	ANSI N45.2.5 Table B	As an alternate to daily testing grout for compressive strength, for prepackaged shelf item, non-shrink grout, the grout's compressive strength tests may be performed once on each batch of non-shrink grout received, rather than each day grout is placed.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 (continued)

		Clarification/Exception
4.	ANSI N45.2.5 Section 4.8	For the performance of correlation tests, the requirements of this standard may be modified as discussed below: Table B, REINFORCING STEEL: In-process testing of reinforcing steel will include the mechanical properties of yield strength, tensile strength and percent elongation on full size specimens for each bar size for each 50 tons or fraction thereof from each mill heat. Bend tests are performed during material qualification testing only, except as noted below for bar sizes #14 through #18. Table A, "Required Qualification Tests" as applied to reinforcing steel will include bend tests as required by ASTM A615 and summarized in the following: a) For bar sizes #3 through #11, one full size specimen from largest bar size rolled from each mill heat, unless material from one heat differs by three or more designation numbers. When this occurs, one bend test shall be made from both the highest and lowest designation number of the deformed bars rolled; b) For bar sizes #14 through #18, Supplementary Requirements S1 of ASTM A615 will be applied, i.e., one fullsize specimen for each bar size for each mill heat. If supplementary requirements are not followed for mill tests, they will be applied as in-process tests. In-process test specimens may be selected at the rebar fabrication shop, prior to start of fabrication of the rebar from the heat or fraction thereof represented by the test specimen. Acceptance criteria for any failed test (qualifications as well as in-process) may be the same as that for tensile tests specified in Subarticle CC-2331.2 of ASME Section III, Div. 2 Code (1975). This states that if a test specimen fails to meet the specified strength requirements, two (2) additional specimens from the same heat and of the same bar size would be tested, and if either of the two additional specimens fails to meet the specified strength requirements, the material represented by the tests would be rejected for the specified use. Alternative use of rejected material under strict control may be subject to evaluation by engineering.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 (continued)

		Clarification/Exception
5.	ANSI N45.2.5 Section 4.9	Entergy may interpret the terms "horizontal, vertical and diagonal bars" to apply respectively to the following types of splice positions: a. Horizontal, including 10° to horizontal; b. Vertical, including 10° to vertical; and c. 45° angle, including 10° to 80° angle. The words "splicing crew" are interpreted to refer to all project members that are actively engaged in preparing and assembling cadweld mechanical splices at the final splice location. Separate test cycles will be established for each bar size and each splice position.
6.	ANSI N45.2.5 Section 5.5	Entergy will comply with inspection requirements of the applicable welding codes and any exceptions instead of this section.

Table 1
Regulatory Commitments

L. Regulatory Guide 1.116 **Revision 0-R, dated June 1976**

		Clarification/Exception
1.	ANSI N45.2.8 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 Revision 1, dated July 1977

	Clarification/Exception
1. RG 1.123 Paragraph C.6.e	This paragraph shall be implemented as originally written in N45.2.13 (i.e., with the verb "should" instead of the verb "shall"). Entergy retains the ultimate responsibility for performance of purchased equipment. The appropriate engineering discipline will exercise this management/engineering prerogative with respect to the final decision on post installation test requirements.
2. ANSI N45.2.13 Section 1.2.2	Item c is an option which may be used to assure quality; however, any option given in 10 CFR 50 Appendix B, Criterion VII as implemented by the QAPM may also be used.
3. ANSI N45.2.13 Section 1.3	Instead of the definition provided for QA Program Requirements, Entergy will comply with the following: "Those individual requirements of the QAPM which, when invoked in total or in part, establish quality assurance program requirements for the activity being controlled. Although not specifically used in the QAPM, ANSI N45.2 may be imposed upon suppliers."
4. ANSI N45.2.13 Section 3.1	The "same degree of control" is stipulated to mean "equivalent level of review and approval." The changed document may not always be reviewed by the originator; however, at least an equivalent level of management/supervision shall review and approve any changes.
5. ANSI N45.2.13 Section 3.1	Changes to procurement documents which are changes in quantity, estimated price, cost codes, taxes, format or editorial changes that do not affect the quality of the item or service do not require an equivalent level of review and approval as the original document.
6. ANSI N45.2.13 Section 3.4	The requirements of the QAPM will be implemented instead of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 (continued)

		Clarification/Exception
7.	ANSI N45.2.13 Section 4.2	Supplier evaluations may be performed any time prior to placing the purchased item in service.
8.	ANSI N45.2.13 Section 8.2 Item b	Non-conformance notices for conditions described in this section are only required to be submitted to Entergy when the non-conformance could adversely affect the end use of an item relative to safety, interchangeability, operability, reliability, integrity or maintainability.
9.	ANSI N45.2.13 Section 10.2 Item d	The section states that the certificate should be attested to by a person who is responsible for this QA function whose function and position are described in the Purchaser's/Supplier's QA program. As an alternate to this requirement, Entergy will use the following: "The person attesting to a certificate shall be an authorized and responsible employee of the supplier, and shall be identified by the supplier."

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980

		Clarification/Exception
1.	RG 1.144 Section C.3.a.(2)	This section is not applicable.
2.	RG 1.144 Section C.3.b.(2)	In addition to the requirements of this section, previously evaluated and approved active suppliers for which auditing is not the selected method of source verification should be evaluated concurrent with the award of a contract. Regardless of the evaluation results, active suppliers (except those excluded under C.3.b(1)) are source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed. Inactive suppliers are evaluated prior to supplying items or services. An audit shall be conducted if required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or another method allowable under 10 CFR 50 Appendix B, Criterion VII).
3.	RG 1.144 Section C.3.b.(2)	Instead of the annual documented evaluation of suppliers discussed in this section, an ongoing evaluation of supplier performance is conducted which takes into account, where applicable, the other considerations of this section and paragraph of the Regulatory Guide.
4.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
5.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 (continued)

	Clarification/Exception
6. ANSI N45.2.12 Section 4.3.2.2	This subsection 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. Entergy will comply with an alternate sentence which reads: "When available, objective evidence shall be examined for compliance with QAPM requirements. If subjective evidence is used (e.g., personnel interviews) then the audit report must indicate how the evidence was obtained."
7. ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.
8. ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
9. ANSI N45.2.12 Section 4.4	Instead of the last sentence of the last paragraph of the section, Entergy will comply with the following: The audit report shall be issued within thirty working days after the last day of the audit. The last day of an audit shall be considered to be the day of the post-audit conference. If a post-audit conference is not held because it was deemed unnecessary, the last day of the audit shall be considered to be the date the post-audit conference was deemed unnecessary as documented in the audit report.
10. ANSI N45.2.12 Section 4.5.1	The QAPM Section A.6 corrective action program may be used instead of these requirements as long as the appropriate time limits are applied to significant conditions adverse to quality. Also, no additional documentation is necessary if needed corrective actions are taken and verified prior to audit report issuance.

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980

		Clarification/Exception
1.	RG 1.144 Section C.3.a.(2)	This section is not applicable.
2.	RG 1.144 Section C.3.b.(2)	In addition to the requirements of this section, previously evaluated and approved active suppliers for which auditing is not the selected method of source verification should be evaluated concurrent with the award of a contract. Regardless of the evaluation results, active suppliers (except those excluded under C.3.b(1)) are source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed. Inactive suppliers are evaluated prior to supplying items or services. An audit shall be conducted if required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or another method allowable under 10 CFR 50 Appendix B, Criterion VII).
3.	RG 1.144 Section C.3.b.(2)	Instead of the annual documented evaluation of suppliers discussed in this section, an ongoing evaluation of supplier performance is conducted which takes into account, where applicable, the other considerations of this section and paragraph of the Regulatory Guide.
4.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
5.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.

Table 1
Regulatory Commitments

O. Regulatory Guide 1.146 Revision 0, dated August 1980

		Clarification/Exception
1.	ANSI N45.2.23 Section 2.3.1.3	Holders of NRC-issued Reactor Operator/Senior Reactor Operator Licenses comply with the requirements of this section and may be awarded two credits.
2.	ANSI N45.2.23 Section 2.3.4	Prospective lead auditors shall demonstrate their ability to effectively implement the audit process and lead an audit team. They shall have participated in at least one audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively lead audits, licensee management may designate a prospective lead auditor as a "lead auditor".

Attachment 1
ANO Specific Requirements

INTRODUCTION

This attachment has been added to the QAPM to maintain compliance with ANO Technical Specifications (Units 1 and 2 TS 6.2.1.a) which requires that organizational details be identified in the QA Manual Operations (i.e., the QAPM).

Additionally, ANO Unit 1 TS 6.9.2 refers to record retention requirements in Section 17 of the QA Manual Operations. In the QAPM the referenced record retention can be found in Table 1 Item J and the associated commitment to Regulatory 1.88 and ANSI N45.2.9.

Technical Specification changes have been requested for the ANO Unit 1 and ANO Unit 2 Technical Specifications to identify that the organizational details are contained in the safety analysis report consistent with the other Entergy plants and remove the record retention requirements. The QAPM will be revised to delete this attachment after the ANO Technical Specification changes have been approved.

1.0 ANO ORGANIZATION

1.1 SCOPE

This section describes the Nuclear Organizational structure and responsibilities for establishing and executing the QA Program for Arkansas Nuclear One, Units 1 & 2 (ANO) in compliance with 10CFR50, Appendix B and applicable licensing commitments identified in the Introduction. It also includes a description of the interfaces with other organizations which may be delegated the work of establishing and executing portions of the QA Program.

1.2 GENERAL RESPONSIBILITIES

The on-site responsibility for ANO, including quality assurance, lies with the Vice President, Operations ANO. He provides management assessment of the QA Program through review of reports generated by the Quality Organization and reports of NRC activities.

1.3 NUCLEAR ORGANIZATION

The Nuclear Organization, headed by the Vice President, Operations ANO is responsible for activities related to the operation of ANO. These activities include as a minimum: design, design operation, maintenance, inservice inspection and test, modification and those additional activities discussed in this manual. The Vice President, Operations ANO, who reports to the Entergy Operations Executive Vice President and Chief Operating Officer, is responsible for the formulation, licensing, implementation and discharge of operating policies and procedures relative to nuclear plant operations, nuclear quality and training. The Vice President, Operation ANO's duties include the following:

(1) Providing technical direction and administrative guidance to the:

a. General Manager, Plant Operations

b. Director, Nuclear Safety

c. Director, Quality

d. Director, Support

e. Director, Training & Emergency Planning

f. Manager, Modifications

(2) Providing priority of engineering tasks to the Director, Engineering

(3) Ensuring conformance to the QA Program by instituting the necessary procedures and instructions within the Nuclear Organization

(4) Providing for review and approval of design and engineering performed for ANO

(5) Providing for review and approval of procurement documents for equipment, material and services

(6) Providing for liaison between ANO and applicable regulatory agencies

(7) Providing and maintaining a qualified and suitable staff to carry out required departmental functions

(8) Assuming overall responsibility for the fire protection, emergency planning and radiation protection programs implemented at ANO

(9) Implementing the Entergy Operations, Inc. Welding Program

1.3.1 General Manager, Plant Operations

The General Manager, Plant Operations reports to the Vice President, Operations ANO and has direct responsibility for operating ANO in a safe, reliable and efficient manner. He is responsible for operating ANO in accordance with the provisions of the operating licenses. The General Manager, Plant Operations has the authority to shut down either unit if required. The General Manager, Plant Operations provides technical direction and administrative guidance to the:

(1) Plant Manager, Unit 1

(2) Plant Manager, Unit 2

(3) Manager, Radiation Protection/Chemistry

(4) Manager, Standards

1.3.1.1 Plant Managers, Unit 1 & 2

The Plant Managers, Unit 1 & 2 report to the General Manager, Plant Operations and are responsible for the actual operation of their assigned nuclear unit, the maintenance of plant equipment and facilities and the planning/scheduling of plant work activities. The Plant Managers, Unit 1 & 2 provide technical direction and administrative guidance to:

(1) Manager, Operations, Unit 1 & 2

(2) Manager, Maintenance, Unit 1 & 2

(3) Project Manager, Outages, Unit 1 & 2

(4) Manager, System Engineering, Unit 1 & 2

1.3.1.1.1 The Managers, Operations, Unit 1 & 2 are responsible for directing the actual day-to-day operations of their assigned unit. They supervise each unit's operating staff and interface with the respective Managers, Maintenance, Unit 1 & 2 to accomplish operation-related maintenance activities. They are responsible for coordination of the daily review of operating surveillance tests and coordination of operation-related

maintenance activities. The Managers, Operations, Unit 1 & 2 are also responsible for supervision of core refueling, which includes advance planning for the outage, plant preparation, equipment checkout and the refueling operations. The Managers, Operations each hold an NRC Senior Reactor Operator License. The Managers, Operations, Unit 1 & 2 provide technical direction and administrative guidance to the Superintendents, Shift Operations of their assigned unit.

1.3.1.1.1 The Superintendents, Shift Operations report to the applicable Manager, Operations and are responsible for the actual operation of the unit and for the activities of the Operators during their assigned shifts. The Superintendent, Shift Operations is cognizant of operation activities being performed while on duty. The Superintendent, Shift Operations on duty has the authority to shut down the unit if, in his judgment, conditions warrant such action. The Superintendents, Shift Operations each hold an active Senior Reactor Operator License. The Superintendents, Shift Operations provide technical direction and administrative guidance to the:

(1) Control Room Supervisor (Holders of active Senior Reactor Operator License)

(2) Shift Engineers

(3) Control Board Operators (Holders of active Reactor Operator License)

(4) Waste Control Operators

(5) Auxiliary Operators

1.3.1.1.2 The Managers, Maintenance, Unit 1 & 2 report to the applicable Plant Manager and are responsible for the maintenance of plant equipment and facilities as defined by plant maintenance program implementing procedures and ensuring that maintenance of equipment is performed in compliance with applicable standards, codes, specifications and procedures. The Managers, Maintenance have responsibility for activities common to Unit 1 and Unit 2. The Managers, Maintenance, Unit 1 & 2 also coordinate operation-related maintenance activities with the applicable Managers, Operations, Unit 1 & 2 and are responsible to make repairs on any structure, system or component under their control.

1.3.1.1.3 The Project Managers, Outages Unit 1 & 2 report to the applicable Plant Manager and are responsible for management and direction of activities to prepare for and control scheduled and non-scheduled unit outages. The responsibilities include detailed planning, preparation and scheduling of refueling outages and other scheduled or forced outages requiring cold shutdown, and directing activities during outages.

1.3.1.1.4 The Managers, System Engineering, Unit 1 & 2, report to the applicable Plant Manager and are responsible for reactor, performance, and system engineering activities required for the safe and efficient production of electricity. These activities include resolving plant related engineering issues that do not alter the system level design bases of the respective plants.

1.3.1.1.5 The planning and scheduling of plant work activities are executed under the ANO Plant Manager for Unit 1 & 2, respectively. The unit outage manager reports to the respective unit plant manager and is responsible for scheduling outage and non-outage work activities for that unit, supervising the scheduling staff, and interfacing with the respective unit maintenance manager, who has responsibility for planning and execution of plant work activities.

1.3.1.1.6 The Manager, Standards reports to the General Manager, Plant Operations and provides planning, direction, control and overall supervision to the Standards Department. The

Manager, Standards also provides planning, direction, control and overall supervision to the Fire Prevention, and Safety Sections, in operating and maintaining ANO. Responsibilities involve the supervision of personnel and daily work activities involving the safe, efficient and reliable operation of ANO. Responsibilities involve the development and administration of programs which support the capability of ANO to meet or exceed industry standards and regulatory requirements. Responsibilities also involve the Chairpersonship of the Plant Safety Committee which reviews the various aspects of operation, maintenance, modification and support to assure the safety of ANO.

1.3.1.2 Manager, Radiation Protection/Chemistry

The Manager, Radiation Protection/Chemistry reports to the General Manager, Plant Operations and is responsible for implementing the Nuclear Organization chemistry, radiation protection and health physics policies, programs, and procedures. The Manager, Radiation Protection/Chemistry is directly responsible for implementing controls which will minimize personnel radiation exposure (ALARA), minimize personnel contamination, minimize radwaste volume, and establish uniform procedures and methods for contamination control and radiation protection. This position is also responsible for implementing contracts, as required to maintain chemistry and radiochemistry parameters in specification and establish chemistry and radiochemistry controls conducive to maximizing plant life.

1.3.2 Director, Nuclear Safety

1.3.2.1 The Director, Nuclear Safety reports to the Vice President, Operations ANO and has overall responsibility for the management and oversight of NRC inspection activities, industry and in-house operation experiences, safety assessments, and interactions with the NRC regional and Washington, DC offices.

The Director, Nuclear Safety provides technical direction and administrative guidance to the:

(1) Supervisor, Licensing - Region

(2) Supervisor, Licensing - NRR

(3) Supervisor, Industry Events Analysis

(4) Supervisor, In-House Events Analysis and Assessment

1.3.2.2 Supervisor, Licensing - Region

The Supervisor, Licensing - Region reports to the Director, Nuclear Safety and is responsible for the following duties:

(1) Interfacing with on-site and regional regulatory agencies and the Director, Nuclear Safety pertaining to Licensing and regulatory matters

(2) Establishing and maintaining a system for monitoring Licensee Event Reports and NRC Inspection Reports

(3) Performing SAR updates

(4) Providing technical direction and administrative guidance to the Licensing Specialists

1.3.2.3 Supervisor, Licensing-NRR

The Supervisor, Licensing-NRR reports to the Director, Nuclear Safety and is responsible for the following duties:

(1) Interfacing with NRC, Washington, DC offices and the Director, Nuclear Safety pertaining to Licensing and regulatory matters

(2) Establishing and maintaining programs for the maintenance of Licensing Base Documents (Operating License, SAR, Technical Specification, Emergency Plan, QA Manual Operations) with the assistance of other department's expertise

(3) Responding to Generic Letters and Bulletins

(4) Reviewing NRC Correspondence (incoming and outgoing) and related industry documents to remain cognizant of activities that may affect ANO

(5) Providing evaluations and recommendations in meeting regulatory commitments

(6) Providing technical direction and administrative guidance to the Licensing Specialists

1.3.2.4 Supervisor, Industry Events Analysis

The Supervisor, Industry Events Analysis reports to the Director, Nuclear Safety and observes the nuclear industry for indicators and lessons learned which can be of use to correct existing ANO problems or to avoid problems others have experienced. The section assesses applicability of current industry issues to ANO and develops proposed action plans for consideration and implementation by line management. Inputs to this function are SOERs, SERs, O&MRs, SEE-IN documents, NRC Information Notices and vendor notifications (including 10CFR21 reports). Additionally, this section is the interface for reporting to Nuclear Network concerning events that occur at ANO.

1.3.2.5 Supervisor, In-House Events Analysis and Assessment

The Supervisor, In-House Events Analysis and Assessment reports to the Director, Nuclear Safety and has the responsibility for administration of ANO's primary corrective action program, the Condition Reporting System. This responsibility includes:

(1) Reviewing identified conditions adverse to quality in order to recommend appropriate dispositions to plant management

(2) Assisting in the performance of root cause determinations to ensure their adequacy

(3) Reviewing the actions taken to resolve conditions and taking action to ensure resolution of the condition

(4) Maintaining a tracking system and reporting mechanism for identified conditions

Additionally, the Supervisor, In-House Events Analysis and Assessment is responsible for providing assessments of plant and industry operating experiences, oversight of plant experiences, oversight of selected key station programs, and assisting station management in monitoring and evaluating ANO performance to ensure that effective management programs are developed, implemented and maintained to achieve the goals and Standards of Excellence as prescribed by senior management. This responsibility is accomplished through a variety of methods including: evaluating plant programs or functional areas, independent investigations of selected plant events or conditions, and a periodic assessment of overall plant activities. The In-House Events Analysis and Assessment section provides independent, objective assessments (outside the traditional auditing role)

c. the overall effectiveness of nuclear programs to help assure that performance expectations are being met. The inputs to this process include the assessment of prior and current ANO performance contrasted against, comparable industry performance, the Standards of Excellence identified by INPO, and the evaluation of industry strengths and good practices for applicability to ANO and other applicable nuclear industry requirements. The Supervisor, In-House Events Analysis and Assessment manages the plant operation experience review program in accordance with INPO guidelines.

1.3.3 Director, Quality

The Director, Quality reports to the Vice President, Operations ANO and has overall responsibility for the Quality Organization which performs reviews, analysis, surveillance, inspection, nondestructive examination and audit functions during the operational phase of ANO. The Quality Organization is also independent of plant operations and has sufficient independence from cost and schedule when opposed to safety considerations. The Director, Quality has direct access to all management levels, which assures his staff the ability to: identify quality problems; initiate, recommend or provide solutions through designated channels; and verify implementation of solutions.

The Director, Quality provides technical and administrative guidance to:

(1) Coordinator, Quality

(2) Supervisor(s), Quality Assurance

(3) Supervisor, Quality Control

(4) Supervisor, NDE

Duties and responsibilities of the Director, Quality include the following:

(1) Technical direction, administrative guidance and supervision to the Coordinator, Quality; Supervisor(s), Quality Assurance; Supervisor, Quality Control; and Supervisor NDE

(2) Approval of the QA Manual Operations and revisions thereto

(3) Approval of QA/QC and NDE procedures and revisions thereto as established within Quality procedures

1.3.3.1 Coordinator, Quality

The Coordinator, Quality reports to the Director, Quality. Duties and responsibilities of the Coordinator, Quality include assisting the Director, Quality with his duties and responsibilities.

1.3.3.2 Supervisor(s), Quality Assurance

The Supervisor(s), Quality Assurance reports to the Director, Quality. Duties and responsibilities of the Supervisor(s), Quality Assurance include the following:

(1) Developing the QA Program requirements for operation, maintenance, and modification activities related to safety-related (Q-listed) systems, structures and components

(2) Auditing of the quality activities as described in this manual

(3) Providing to the Director, Quality, on an annual basis, the results of a review of the QA Program to determine the effectiveness and proper implementation of the QA Program

(4) Authority to stop work where conditions exist that prohibit effective quality programs, or if faulty materials, incorrect workmanship or procedures are detected

(5) Ensuring approval and control of quality assurance programs for outside organizations participating in the QA Program

(6) Providing and maintaining a qualified and suitably trained staff to carry out required staff functions

(7) Formulating programs for maintaining the professional competence of personnel within the Quality Assurance section and providing assistance in Quality Assurance training and indoctrination programs for management, engineering and plant personnel whose activities affect quality

(8) Providing technical direction and guidance to the Quality Assurance staff

(9) Inspecting, auditing or reviewing practices, records, files, instructions, directives or documents concerned with all areas affecting quality

(10) Scheduling and coordinating audits or surveillance efforts in the areas assigned, documenting findings and reporting results to the Director, Quality and management of the audited area

1.3.3.3 Supervisors, Quality Control and NDE

The Supervisors, Quality Control and NDE report to the Director, Quality and are responsible for verifying the implementation of the Quality Control program at ANO. The duties and responsibilities of the Supervisors include the following:

(1) Interface with plant staff in developing quality control requirements and inspection points for operation, maintenance and modification activities related to safety-related (Q-listed) and fire protection-related (F-listed) systems, structures and components

(2) Interface with the Supervisor(s), Quality Assurance or their representatives for technical assistance in resolving significant conditions adverse to quality

(3) Authority to stop unsatisfactory work and authority to place an item in a nonconforming status when such an item is determined to be in violation of purchase documents, applicable codes and standards or SAR requirements

(4) Assuring surveillances, inspections, examinations, and reviews of plant activities and documents are conducted in accordance with approved procedures

(5) Providing technical direction and guidance to their staffs

(6) Providing and maintaining a qualified and suitably trained staff to carry out required staff functions and formulate programs for maintaining the professional competence of personnel within the Quality Control and NDE sections

1.3.4 Director, Support

The Director, Support reports to the Vice President, Operations ANO and is responsible for managing the nuclear five-year business plan, including establishing the budget and managing the goals and objectives program for the Nuclear Organization. Management of payroll and accounting is also provided by the Director, Support. He also provides planning, direction, control and overall supervision to the Fitness for Duty Department and Plant Security Department. Additionally, the control and maintenance of ANO records are a

~~esponsibility of the Director, Suppo... The Director, Support is responsible for providing direction and general supervision to the following technica... and administrative individuals in support of the Vice President, Operations ANO:~~

~~(1) Manager, Site Business Services~~

~~(2) Manager, Support~~

~~(3) Medical Review Officer/Physician~~

~~(4) Superintendent, Administrative Services~~

~~(5) Superintendent, Plant Security~~

~~(6) Coordinators, Special Projects~~

~~1.3.4.1 Superintendent, Plant Security~~

~~The Superintendent, Plant Security reports to the Director, Support and is responsible for plant security includi... coordination of efforts of the security force and managing the operation of the security system.~~

~~1.3.5 Manager, Materials, Purchasing and Contracts - ANO~~

~~The Manag... Materials, Purchasing and Contracts - ANO reports to the offsite Director, Materials, Purchasing and Contracts ... and has direct responsibility for procurement, receipt, storage and issue of materials, parts and components to... e used in Plant maintenance and modification activities. The Manager, Materials, Purchasing and Contrac... establishes work priorities for Procurement Engineering. The Manager, Materials, Purchasing and Contracts ... rovides technical direction and administrative guidance to the following:~~

~~(1) Superintendent, Stores Operations~~

~~(2) Superintendent, Inventory Control~~

~~(3) Supervisor, Procurement~~

~~(4) Supervisor, Materials Technical~~

~~1.3.6 Manager, Modifications~~

~~The Manag... Modifications reports to the Vice President, Operations ANO and provides direction, control and overall supe... sion to the Modifications Department in directing and overseeing the implementation of plant modifications ... nd the performance of related support activities at ANO. Responsibilities include: directing the activities of t... ANO Maintenance and Modifications Contractor and other contractors performing modification work at ANO ... onitoring the effectiveness of the ANO Plant Modifications Program, and coordinating the resolution of relate... roblems and the implementation of needed program improvements; and providing engineering services to supp... t the review, preplanning, installation, testing, inspection, and closeout of Modification Packages. The Manager... lodifications is also responsible for the overall direction and conduct of the Post-Modification test program. The Ma... ger, Modifications provides technical direction and administrative guidance to the:~~

~~(1) Supervisors, Modifications~~

~~(2) Supervisor, Project Services/Estimating~~

(3) Supervisor, Modifications Central Support

1.3.7 Director, Training and Emergency Planning

The Director, Training and Emergency Planning reports to the Vice President, Operations ANO and is responsible for the training and retraining of plant personnel and general office personnel as established by approved procedures. The Director, Training and Emergency Planning is also responsible for the implementation and maintenance of the ANO Emergency Plan. The Director, Training and Emergency Planning directs the activities of the ANO training staff and provides technical direction and administrative guidance to the:

(1) Supervisor, Operations Training

(2) Supervisor, Simulator Training

(3) Supervisor, Simulator Support

(4) Supervisor, Emergency Planning

(5) Supervisor, Maintenance Training

(6) Supervisor, Technical Training

(7) Coordinator, INPO Accreditation

(8) Technical Assistant to Director, Training & Emergency Planning

1.3.8 Director, Design Engineering

The Director, Design Engineering reports offsite to the Vice President, Engineering. The responsibilities of this position include the development and maintenance of engineering programs, policies and procedures; providing engineering services in support of design, evaluation, analysis, installation, testing, inspection, and operation of Arkansas Nuclear One; effective design modifications to correct deficiencies in plant systems and equipment, improve plant availability, efficiency, safety or productivity and assure thorough and complete design documentation to support effective configuration management for Arkansas Nuclear One.

The Director, Design Engineering provides technical direction and administrative guidance to others who direct activities in the areas of plant modifications, operability assessments, maintenance of the design bases of Arkansas Nuclear One, nuclear safety analyses, environmental qualifications, technical assistance in the resolution of Operations and Maintenance concerns, engineering standards, technical manuals, fire protection, engineering databases, onsite engineering programs, inservice inspection, inservice testing, and on-site welding.

1.3.9 Independent Review Organizations

In addition to the responsibilities of key individuals within the Nuclear Organization who are involved with the overall quality program, the following committees have been established as management tools to independently review activities occurring during the operational phase of ANO.

1.3.9.1 Safety Review Committee (SRC)

1.3.9.1.1 The Safety Review Committee shall function to provide independent review and audit of designated activities in the areas of:

a. Nuclear power plant operations

b. Nuclear engineering

c. Chemistry and radiochemistry

d. Metallurgy

e. Instrumentation and control

f. Radiological safety

g. Mechanical and electrical engineering

h. Quality assurance practices

1.3.9.1.2Composition

1.3.9.1.2.1 The SRC shall be composed of a chairman and eight to twelve members.

1.3.9.1.2.2 The Vice President, Operations ANO shall designate, in writing, the Chairman and all SRC members.

1.3.9.1.2.3 The Chairman shall designate, in writing, the alternate Chairman in the absence of the SRC Chairman.

1.3.9.1.2.4 All alternate members shall be appointed in writing by the SRC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SRC activities at any one time.

1.3.9.1.2.5 Consultants shall be utilized as determined by the SRC Chairman to provide expert advice to the SRC.

1.3.9.1.3Review Function

1.3.9.1.3.1 The SRC shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per six months thereafter. The minimum quorum of the SRC necessary for the performance of the SRC review and audit functions of these technical specifications shall consist of the Chairman or his designated alternate and at least a majority of the SRC members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the unit.

1.3.9.1.3.2 The SRC shall report to and advise the Vice President, Operations ANO on those areas of responsibility specified in paragraph 1.3.9.1.3.3 below.

1.3.9.1.3.3 The SRC shall review:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of 10 CFR 50.59 to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.

d. Proposed changes to Technical Specifications or Operating Licenses.

e. Violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All REPORTABLE EVENTS pursuant to Technical Specification 6.6.2 and 6.6.1 (for Unit 1 and Unit 2 respectively).

h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.

i. Reports and meetings minutes of the Plant Safety Committee.

j. Proposed changes to the ODCM and PCP.

k. Audits of facility activities as specified in this manual.

1.3.9.1.4 Records of SRC activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each SRC meeting shall be prepared, approved and forwarded to the Vice President, Operations ANO within 14 days following each meeting.

b. Reports of reviews encompassed by paragraph 1.3.9.1.3.3 above shall be prepared, approved and forwarded to the Vice President, Operations ANO within 14 days following completion of the review.

c. Audit reports encompassed by this manual shall be forwarded to the Vice President, Operations ANO and to the management positions responsible for the areas audited within 30 days after completion of the audit.

1.3.9.2 Plant Safety Committee (PSC)

1.3.9.2.1 The Plant Safety Committee for each operating unit shall function to advise the General Manager, Plant Operations and applicable Plant Manager on all matters related to nuclear safety.

1.3.9.2.2 Composition

1.3.9.2.2.1 The Plant Safety Committee for each operating unit shall be composed of eight members of ANO onsite management organization whose selection is described in internal procedures.

1.3.9.2.2.2 The General Manager, Plant Operations shall designate in writing a PSC Chairman and at least one Alternate Chairman.

1.3.9.2.2.3 All alternate members shall be appointed in writing by the PSC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in PSC activities at any one time.

1.3.9.2.2.4 For Unit 2 PSC, if Core Protection Calculator (CPC) Software is being reviewed, a nuclear software expert shall be present as a voting member. If one of the members of the Plant Safety Committee meets the qualification requirements for this position,

~~the requirement to have this member is satisfied. This membership may be filled by two appropriately qualified individuals who shall ballot with a single combined vote. Generic qualifications for this membership shall be as follows:~~

~~One Individual~~

~~The Nuclear Software Expert shall have as a minimum a Bachelor's degree in Science or Engineering, (Nuclear preferred) in accordance with ANSI N18.1. In addition, he shall have a minimum of four years of technical experience, of which a minimum of two years shall be in Nuclear Engineering and a minimum of two years shall be in Software Engineering. (Software Engineering is that branch of science and technology which deals with the design and use of software. Software Engineering is a discipline directed to the production and modification of computer programs that are correct, efficient, flexible, maintainable, and understandable, in reasonable time spans, and at reasonable costs.) The two years of technical experience in Software Engineering may be general software experience not necessarily related to the software of the Core Protection Calculator System. One of these two years of experience shall be with certified computer programs.~~

~~Two Individuals~~

~~One of the individuals shall meet the requirements of the Nuclear Engineering portion of the above. The second individual shall have a Bachelor of Science degree (digital computer specialty) and meet the Software Engineering requirements of the above. The membership (the Nuclear Software Expert or the Digital Computer Specialist) shall be knowledgeable of the Core Protection Calculator System with regard to:~~

~~a. The software modules, their interactions with each other and with the data base.~~

~~b. The relationship between operator's module inputs and the trip variables.~~

~~c. The relationship between sensor input signals and the trip variable.~~

~~d. The design basis of the Core Protection Calculator System.~~

~~e. The approved software change procedure and documentation requirements of a software change.~~

~~f. The security of the computer memory and access procedures to the memory.~~

~~1.3.9.2.3 Review Function~~

~~1.3.9.2.3.1 The PSC for each operating unit shall meet at least once per calendar month and as convened by the PSC Chairman or his designated alternate. The minimum quorum of the PSC necessary for the performance of the PSC responsibilities designated in this manual shall consist of the Chairman or his designated alternate and four members including alternates. The PSC Chairman shall ensure that adequate expertise is present during meetings to evaluate material before the PSC.~~

~~1.3.9.2.3.2 The Plant Safety Committee shall be responsible for:~~

~~a. Review of 1) all station administrative procedures recommended in Appendix A of Reg. Guide 1.33 (November, 1972 for Unit 1 and Revision 2, February, 1978 for Unit 2) and changes in intent thereto, 2) changes to the Emergency Operating Procedures for each operating unit required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in Section 7.1 of Generic Letter 82-33, 3) changes to Core Protection Calculator (CPC) Software (for Unit 2), and 4) any other proposed procedures or changes thereto as determined by the General Manager, Plant Operations or applicable Plant Manager.~~

b. Review of all proposed tests and experiments that affect nuclear safety.

c. Review of all proposed changes to Appendix "A" Technical Specifications for each operating unit.

d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety.

e. Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendation to prevent recurrence to the applicable Plant Manager, General Manager, Plant Operations and the Chairman of the Safety Review Committee.

f. Review of all REPORTABLE EVENTS.

g. Review of facility operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations or analyses, and reports thereon as requested by a Plant Manager, General Manager, Plant Operations or the Safety Review Committee.

i. Review of the Plant Security Plan and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

j. Review of the Emergency Plan and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

k. Review of changes to the Offsite Dose Calculation Manual and Process Control Program.

l. Review of changes to the Fire Protection Program and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

m. Review of proposed procedures and changes to procedures which involve an unreviewed safety question as defined in 10CFR50.59.

n. Review and documentation of judgment concerning extended operation (longer than 48 hours) with a PPS trip channel in bypass. Review shall determine whether to leave the trip channel in bypass, place the channel in trip, and/or repair the defective

The Plant Safety Committee shall:

a. Recommend in writing their approval or disapproval of items considered under paragraph 1.3.9.2.3.2(a) through (d) above.

b. Render determinations in writing with regard to whether or not each item considered under paragraph 1.3.9.2.3.2(a) through (e) above constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Vice President, Operations ANO and the Safety Review Committee of disagreement between the PSC and a Plant Manager or the General Manager, Plant Operations; however, the General Manager, Plant Operations shall have responsibility for resolution of such disagreements pursuant to Technical Specification 6.1.1 for each operating unit.

1.3.9.2.4 The Plant Safety Committee shall maintain written minutes of each PSC meeting that, at a minimum, document the results of all PSC activities performed under paragraphs 1.3.9.2.3.2 and 1.3.9.2.3.3 above. Copies shall be provided to the applicable Plant Manager, General Manager, Plant Operations and Chairman of the Safety Review Committee.

1.4 ENTERGY OPERATIONS OFFSITE ORGANIZATION

~~1.4.1 President & Chief Executive Officer~~

~~The President & Chief Executive Officer has the ultimate responsibility for the safe and reliable operation of the Entergy Operations' nuclear sites. He provides guidance with regard to quality assurance and internal audit policy, coordinates foreign visits, interfaces with World Association of Nuclear Operations, interfaces with the state public service commissions, and oversees strategic planning.~~

~~He delegates authority and responsibility for the operation and support of ANO through the Executive Vice President & Chief Operating Officer; the Director, Business Services; the Director, Nuclear Fuels; and the Director, Total Quality.~~

~~1.4.2 Executive Vice President & Chief Operating Officer~~

~~The Executive Vice President & Chief Operating Officer has the responsibility to oversee all operations and engineering functions of Entergy Operations. He delegates authority and responsibility for the operation and support of ANO through the Vice President, Operations ANO; the Vice President, Engineering; and the Vice President, Operations Support. It is the responsibility of the Executive Vice President & Chief Operating Officer to assure that all safety-related activities under his direction are performed following the guidelines of the Quality Assurance Program Manual.~~

~~1.4.2.1 Vice President, Operations Support~~

~~The Vice President, Operations Support reports directly to the executive Vice President and Chief Operating Officer and is responsible for administering corporate support functions in the areas of radiological protection, radioactive waste management, chemistry, environmental services, operations, maintenance, outage management, security, emergency planning, technology transfer, licensing; plant assessments, information technology, material requirements and materials, purchasing and contracts. It is the responsibility of the Vice President, Operations, Support to assure that these functions performed for ANO are performed in accordance with the requirements of the Quality Assurance Program Manual.~~

~~1.4.2.1.1 Director, Materials, Purchasing & Contracts~~

~~The Director, Materials, Purchasing and Contracts reports to the Vice President, Operations Support and is responsible for the oversight and development of purchasing policies and procedures consistent across Entergy Operations nuclear sites and Headquarters and providing the direction and administration necessary relative to quality responsibilities as they relate to the Quality Assurance Program Manual.~~

~~1.4.2.1.1.1 Manager, Material Requirements~~

~~The Manager, Material Requirements reports to the Director, Materials, Purchasing and Contracts and is responsible for:~~

~~1. Evaluating quality assurance programs and activities of ANO suppliers and contractors of quality-related items, spare parts, and services through reviews, surveillances, and audits;~~

~~2. Conducting pre-award evaluations for quality requirements of vendors, suppliers, and contractors, where applicable.~~

~~3. Maintaining a Qualified Suppliers List (QSL) for use in procuring safety-related items, spare parts, and services; and~~

4. Performing design review and fuel fabrication audits as necessary to ensure that nuclear fuel procured for use by Entergy Operations is designed and fabricated in accordance with applicable codes, standards, and regulations.

The authority for the accomplishment of the above activities is delegated to the incumbent's staff.

1.4.2.2 Director, Nuclear Fuels

The Director, Nuclear Fuels reports to the Executive Vice President and Chief Operating Officer and is responsible for the procurement of nuclear fuel for ANO, the provision of nuclear fuel cash flow and cost projections for use in company business plan and fuel financing activities, the maintenance of the Official Entergy Operations Nuclear Operating Schedule, and the oversight of nuclear fuel accounting activities.

1.4.2.3 Vice President, Engineering

The Vice President, Engineering reports to the Executive Vice President and Chief Operating Officer and is responsible for providing nuclear engineering services for ANO, as requested. The incumbent is responsible for Design Engineering, fuel design and core design. In addition, the incumbent has overall administrative, programmatic and operational control of the Entergy Operations, Inc. Welding Program.

1.4.3 Vice President, Human Resources & Administration

The Vice President Human Resources & Administration is responsible for the administration of functions associated with Corporate Services and Human Resources. He delegates authority and responsibility for the accomplishment of the above activities through the Director, Human Resources. It is the responsibility of the Vice President, Human Resources & Administration to assure that the safety related activities under his direction are performed following the guidelines of the Quality Assurance Program Manual.

1.4.3.1 Director, Human Resources

The Director, Human Resources reports to the Vice President, Human Resources and Administration and is responsible for functions associated with programs dealing with employees compensation, benefits, employee and labor relations, affirmative action, recruitment, industrial safety, succession planning and human resource development. He delegates authority and responsibility for employee relations activities at ANO through the Manager, Human Resources-ANO.

1.5 ORGANIZATIONAL INTERFACES AND RESPONSIBILITIES

Entergy Arkansas, Inc. and Entergy Operations, Inc. are joint licensees under the facility operating license condition, each responsible for specific areas and jointly responsible for regulatory compliance and response. Entergy Arkansas, Inc. is licensed to possess the facility and Entergy Operations, Inc. is licensed to possess, use and operate the facility.

Each supplier of equipment, material or services and each maintenance or modification contractor is responsible for administering the applicable quality assurance/quality control functions as required by ANO. The Quality Organization is responsible for assuring by surveillance, inspection, audit or review of objective evidence that onsite functions are accomplished for systems, structures and services that affect the safety and integrity of the plant.

QAPM Revision 1

Package Contains:

50.54(a) Evaluation Documentation

Revision 1 and Attachment 1, ANO Specific Requirements

Quality Assurance Program Manual
10CFR50.54(a)(3)

Change

Revision 1 to the EOI Quality Assurance Program Manual (QAPM) added Attachment 1. This attachment contains organizational details as required by the ANO Technical Specifications. A reference to Attachment 1 was added to the Table of Contents. Also, a statement was added to section A.2 referring to Attachment 1.

Additionally, a cross reference was included in the introductory section to Attachment 1 to explain the meaning of the record retention requirements in ANO Unit 1 TS 6.9.2.i referred to in Section 17 of the QA Manual Operations. In the QAPM, the referenced record retention can be found in Table 1 Item J and the associated commitment to Regulatory 1.88 and ANSI N45.2.9.

Reason for Change

This attachment has been added to the QAPM to maintain compliance with ANO Technical Specifications (Units 1 and 2 TS 6.2.1.a) which requires that organizational details be identified in the QA Manual Operations (i.e., the QAPM) and provide a cross reference for Unit 1 TS 6.9.2.i. Technical Specification changes have been requested for the ANO Unit 1 and ANO Unit 2 Technical Specifications to identify that the organizational details are contained in the safety analysis report consistent with the other Entergy plants and remove the record retention requirements. The QAPM will be revised to delete this attachment and references to it, after the ANO Technical Specification changes have been approved.

Justification (basis for change)

This change did not constitute any change to any of the functional responsibilities, or to any of the management titles. This change was administrative only. The attachment was added to the QAPM only to maintain compliance with ANO's Technical Specifications until the Technical Specification change is approved.

Prepared by: Glenn E. Dick Date: 04/27/99

Independent Review: [signature] Date: 04/27/99

ANO Director Nuclear Safety: SEE ATTACHED Date: _____

Echelon Director, NS&L: [signature] for L.J. Bethay Date: 4/29/99

GGNS Director, Quality: SEE ATTACHED Date: _____

RBS Manager, Quality: SEE ATTACHED Date: _____

WF3 Director, Quality: SEE ATTACHED Date: _____

Vice-President, Operations Support: [signature] for M.R. Kansler Date: 4/30/99

Quality Assurance Program Manual
10CFR50.54(a)(3)

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Independent Review: original signed by Bryan Ford **Date:** 04/27/99

ANO Director Nuclear Safety: [signature] **Date:** 4/29/99

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ANO Director Nuclear Safety: SEE ATTACHED **Date:** _____

Echelon Director, NS&L: SEE ATTACHED **Date:** _____

GGNS Director, Quality: [signature] **Date:** 4/28/99

RBS Manager, Quality: SEE ATTACHED **Date:** _____

WF3 Director, Quality: SEE ATTACHED **Date:** _____

Vice-President, Operations Support: SEE ATTACHED **Date:** _____

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Quality Assurance Program Manual

Arkansas Nuclear One
Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

River Bend Station
Docket No. 50-458
License No. NPF-47

Waterford 3 Steam Electric Station
Docket No. 50-382
License No. NPF-38

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A. MANAGEMENT

1. Methodology

a. The Quality Assurance Program Manual (QAPM) provides a consolidated overview of the quality program controls which govern the operation and maintenance of Entergy Operations, Inc.'s (Entergy's) quality related items and activities. The QAPM describes the quality assurance organizational structure, functional responsibilities, levels of authority, and interfaces.

b. The requirements and commitments contained in the QAPM are mandatory and must be implemented, enforced, and adhered to by all individuals and organizations. Employees are encouraged to actively participate in the continued development of the QAPM as well as its implementation. Changes should be promptly communicated when identified.

c. The QAPM applies to all activities associated with structures, systems, and components which are safety related or controlled by 10 CFR 72. The QAPM also applies to transportation packages controlled by 10 CFR 71. The methods of implementation of the requirements of the QAPM are commensurate with the item's or activity's importance to safety. The applicability of the requirements of the QAPM to other items and activities is determined on a case-by-case basis. The QAPM implements 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

d. The QAPM is implemented through the use of approved procedures (i.e., policies, directives, procedures, instructions, or other documents) which provide written guidance for the control of quality related activities and provide for the development of documentation to provide objective evidence of compliance.

2. Organization

The organizational structure responsible for implementation of the QAPM is described below. The specific organization titles for the quality assurance functions described are identified in procedures. The authority to accomplish the quality assurance functions described is delegated to the incumbent's staff as necessary to fulfill the identified responsibility. ANO specific details can be found in Attachment 1.

A.2 (continued)

a. The chief executive officer is responsible for providing top level direction of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief executive officer provides guidance with regards to company quality assurance policy.

b. The chief operating officer reports to the chief executive officer and is responsible for the implementation of all activities associated with the safe and reliable operation of Entergy's nuclear sites. The chief operating officer provides guidance with regards to company quality assurance policy.

c. The following executives report to the chief operating officer:

1. The executive responsible for overall plant nuclear safety at each site is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program at the respective site and overseeing activities of the associated off-site safety review committee.

2. The executive responsible for operations support is responsible for establishing the policies, goals, and objectives and the implementation of the quality assurance program of Entergy's corporate activities and maintaining this QAPM in accordance with regulatory requirements.

3. The executive responsible for engineering is responsible for providing engineering services.

d. The individuals fulfilling the following management functions report to the executives identified above. These individuals may report through an additional layer of management but shall maintain sufficient authority and organizational freedom to implement the assigned responsibilities. These individuals may be responsible for a single unit/location or for multiple units/locations and may fulfill more than one function described below:

1. The manager responsible for quality assurance has overall authority and responsibility for establishing, controlling, and verifying the implementation and adequacy of the quality assurance program as described in this QAPM. The manager responsible for quality assurance has the authority and responsibility to escalate matters directly to the chief executive officer when needed.

A.2.d (continued)

2. The manager responsible for plant operations assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. The functional responsibility includes:

   a. chemistry,
   b. operations,
   c. maintenance,
   d. radiological protection,
   e. plant engineering,
   f. implementation of design activities,
   g. work control,
   h. tests,
   i. on-site safety review committee, and
   j. maintenance of the plant in conformance with approved design.

3. The manager responsible for plant modification provides direction, control, and overall supervision of the implementation of plant modifications and assigned maintenance. Separate managers may be responsible for different modification activities.

4. The manager responsible for training provides direction, control, and overall supervision of all training of personnel required by regulations.

5. The manager responsible for records management provides direction, control, and overall supervision of the records management program and associated activities.

6. The manager responsible for document control provides direction, control, and overall supervision of the document control program and associated activities.

7. The manager responsible for the corrective action program provides direction, control, and overall supervision of the corrective action program and associated activities.

8. The manager responsible for engineering is responsible for the development and maintenance of engineering programs, policies, and procedures and for providing engineering services. Different aspects of these responsibilities (e.g., fuel design) may be fulfilled by separate managers.

A.2.d (continued)

9. The manager responsible for materials, purchasing, and contracts is responsible for supplier evaluations, source verifications, procurement, services, receipt, storage, and issue of materials, parts, and components. Different aspects of these responsibilities (e.g., source verification) may be fulfilled by separate managers.

e. The on-site and off-site safety review committees independently review activities to provide additional assurance that the units are operated and maintained in accordance with the Operating License and applicable regulations which address nuclear safety.

3. Responsibility

a. Entergy has the responsibility for the scope and implementation of an effective quality assurance program.

b. Entergy may delegate all or part of the activities of planning, establishing, and implementing the quality assurance program to others, but retains the responsibility for the program's effectiveness.

c. The adequacy of the QAPM's implementation is assessed annually by the manager(s) responsible for quality assurance and reported to the chief executive officer and the associated executive for overall plant nuclear safety.

d. Entergy is responsible for ensuring that the applicable portion(s) of the quality assurance program is properly documented, approved, and implemented (people are trained and resources are available) before an activity within the scope of the QAPM is undertaken by Entergy or by others.

e. Individual managers are to ensure that personnel working under their management cognizance are provided the necessary training and resources to accomplish their assigned tasks within the scope of the QAPM.

f. Procedures that implement the QAPM are approved by the management responsible for the applicable quality function. These procedures are to reflect the QAPM and work is to be accomplished in accordance with them.

A. (continued)

4. Authority

a. When Entergy delegates responsibility for planning, establishing, or implementing any part of the overall QA program, sufficient authority to accomplish the assigned responsibilities is delegated.

b. The manager responsible for quality assurance has the responsibility and the authority to stop unsatisfactory work and control further processing, delivery, installation, or use of non-conforming items or services. Cost and schedule considerations will not override safety considerations.

5. Personnel Training and Qualification

a. Personnel assigned to implement elements of the quality assurance program are capable of performing their assigned tasks.

b. Training programs are established and implemented to ensure that personnel achieve and maintain suitable proficiency.

c. Personnel training and qualification records are maintained in accordance with procedures.

d. Additional details concerning Personnel Training and Qualification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.8, 1.58, and 1.146).

6. Corrective Action

a. It is the responsibility of each individual to promptly identify and report conditions adverse to quality. Management at all levels encourages the identification of conditions that are adverse to quality.

b. A corrective action program is established and implemented that includes prompt identification, documentation, and correction of conditions adverse to quality. The corrective action program for significant conditions adverse to quality shall require cause determination (when possible) and a corrective action plan that should lessen the likelihood of the recurrence.

A.6 (continued)

c. Specific responsibilities within the corrective action program may be delegated, but Entergy maintains responsibility for the program's effectiveness.

d. Non-conforming items are properly controlled to prevent their inadvertent test, installation, or use. They are reviewed and either accepted, rejected, repaired, or reworked.

e. Reports of conditions that are adverse to quality are analyzed to identify trends in quality performance. Significant conditions adverse to quality and significant trends are reported to the appropriate level of management.

f. Additional details concerning corrective action activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. Regulatory Commitments

a. Except where alternatives are identified, Entergy complies with the QA guidance documents listed on Table 1. If the guidance in one of these documents is in conflict with the QAPM, the guidance provided in the QAPM is the controlling guidance. Additionally, the following clarifications apply to all guidance documents listed in Table 1:

1. For modifications and nonroutine maintenance, guidance applicable to construction-like activities is applicable to comparable plant activities. Except that the inspection of modifications, repairs, rework, and replacements shall be in accordance with the original design and inspection requirements or a documented approved alternative.

2. The definitions provided by Regulatory Guide 1.74 and associated clarifications as described in Table 1 apply wherever the defined term is used in the QAPM and associated guidance documents.

3. Clarification to a guidance document applies wherever the guidance document is invoked.

A.7.a (continued)

4. In each of the ANSI standards, other documents (e.g., other standards, codes, regulations, tables, or appendices) are referenced or described. These other documents are only quality assurance program requirements if explicitly committed to in the QAPM. If not explicitly committed to, these documents are not considered as quality assurance program requirements, although they may be used as guidance.

5. Guidance applicable to safety related items and activities is applicable to comparable items and activities controlled by 10 CFR 72 and transportation packages controlled by 10 CFR 71.

b. The NRC is to be notified of QAPM changes in accordance with 10 CFR 50.54(a)(3).

B. PERFORMANCE/VERIFICATION

1. Methodology

a. Personnel performing work activities such as design, engineering, procurement, manufacturing, construction, installation, startup, maintenance, modification, operation, and decommissioning are responsible for achieving acceptable quality.

b. Personnel performing verification activities are responsible for verifying the achievement of acceptable quality and are different personnel than those who performed the work.

c. Work is accomplished and verified using instructions, procedures, or other appropriate means that are of a detail commensurate with the activity's complexity and importance to safety.

d. Criteria that define acceptable quality are specified, and quality is verified against these criteria.

2. Design Control

a. The design control program is established and implemented to assure that the activities associated with the design of systems, components, structures, and equipment and modifications thereto, are executed in a planned, controlled, and orderly manner.

B.2 (continued)

b. The program includes provisions to control design inputs, processes, outputs, changes, interfaces, records, and organizational interfaces.

c. Design inputs (e.g., performance, regulatory, quality, and quality verification requirements) are to be correctly translated into design outputs (e.g., specifications, drawings, procedures, and instructions).

d. The final design output is to relate to the design input in sufficient detail to permit verification.

e. The design process is to ensure that items and activities are selected and independently verified consistent with their importance to safety to ensure they are suitable for their intended application.

f. Changes to final designs (including field changes and modifications) and dispositions of non-conforming items to either use-as-is or repair are to be subjected to design control measures commensurate with those applied to the original design and approved by the organization that performed the original design or a qualified designee.

g. Interface controls (internal and external between participating design organizations and across technical disciplines) for the purpose of developing, reviewing, approving, releasing, distributing, and revising design inputs and outputs are defined in procedures.

h. Design documentation and records, which provide evidence that the design and design verification process was performed in accordance with this program, shall be collected, stored, and maintained in accordance with documented procedures. This documentation includes final design documents, such as drawings and specifications, and revisions thereto and documentation which identifies the important steps, including sources of design inputs that support the final design.

i. Additional details concerning design control activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

3. Design Verification

a. A program is established and implemented to verify the acceptability of design activities and documents for the design of items. The selection and incorporation of design inputs and design processes, outputs, and changes are verified.

B.3 (continued)

b. Verification methods include, but are not limited to, design reviews, alternative calculations, and qualification testing. The extent of this verification will 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. Standardized or previously proven designs will be reviewed for applicability prior to use.

c. When a test program is used to verify the acceptability of a specific design feature, the test program is to demonstrate acceptable performance under conditions that simulate the most adverse design conditions that are expected to be encountered.

d. Independent design verification is to be completed before design outputs are used by other organizations for design work and before they are used to support other activities such as procurement, manufacture, or construction. When this timing cannot be achieved, the unverified portion of the design is to be identified and controlled. In all cases, the design verification is to be completed before relying on the item to perform its function.

e. Individuals or groups responsible for design reviews or other verification activities shall be identified in 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. The designer's immediate supervisor may perform the design verification provided:

1. the supervisor is the only technically qualified individual capable of performing the verification,

2. the need is individually documented and approved in advance by the supervisor's management, and

3. the frequency and effectiveness of the supervisor's use as a design verifier are independently verified to guard against abuse.

f. Design verification procedures are to be established and implemented to ensure that an appropriate verification method is used, the appropriate design parameters to be verified are chosen, the acceptance criteria are identified, the verification is satisfactorily accomplished, and the results are properly recorded.

B.3 (continued)

g. Additional details concerning design verification activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.64).

4. Procurement Control

a. A program is established and implemented to ensure that purchased items and services are of acceptable quality.

b. The program includes provisions for evaluating prospective suppliers and selecting only qualified suppliers.

c. The program includes provisions for ensuring that qualified suppliers continue to provide acceptable products and services.

d. The program includes provisions (e.g., source verification, receipt inspection, pre-installation and post-installation tests, and certificates of conformance) for accepting purchased items and services.

e. Applicable technical, regulatory, administrative, and reporting requirements (e.g., specifications, codes, standards, tests, inspections, special processes, and 10 CFR Part 21) are invoked for procurement of items and services.

f. The program includes provisions for ensuring that documented evidence of an item's conformance to procurement requirements is available at the site before the item is placed in service or used unless otherwise specified in procedures.

g. The program includes provisions for ensuring that procurement, inspection, and test requirements have been satisfied before an item is placed in service or used unless otherwise specified in procedures.

h. The procurement of components, including spare and replacement parts, is subject to quality and technical requirements suitable for their intended service.

i. Appropriate controls for the selection, determination of suitability for intended use (critical characteristics), evaluation, receipt, and quality evaluation of commercial grade items are to be imposed to ensure that the items will perform satisfactorily in service.

B.4. (continued)

j. Additional details concerning procurement control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.123).

5. Procurement Verification

a. A program is established and implemented to verify the quality of purchased items and services at intervals and to a depth consistent with the item's or service's importance to safety, complexity, and quantity and the frequency of procurement.

b. The program is executed in all phases of procurement. As necessary, this may require verification of activities of suppliers below the first tier.

c. Additional details concerning procurement verification may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.123 and 1.144).

6. Identification and Control of Items

a. A program is established and implemented to identify and control items to prevent the use of incorrect or defective items.

b. Identification of each item is maintained throughout fabrication, erection, installation, and use so that the item can be traced to its documentation. Traceability is maintained to an extent consistent with the item's importance to safety.

c. Additional details concerning identification and control of items may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

7. Handling, Storage, and Shipping

a. A program is established and implemented to control the handling, storage, shipping, cleaning, and preserving of items to ensure the items maintain acceptable quality.

b. Special protective measures (e.g., containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels, and temperature levels) are specified and provided when required to maintain acceptable quality.

B.7 (continued)

c. Specific procedures are developed and used for cleaning, handling, storage, packaging, shipping, and preserving items when required to maintain acceptable quality.

d. Items are marked and labeled during packaging, shipping, handling, and storage to identify, maintain, and preserve the items' integrity and indicate the need for special controls.

e. Additional details concerning handling, storage, and shipping activities may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.38).

8. Test Control

a. A test control program is established and implemented to demonstrate that items will perform satisfactorily in service.

b. Criteria are defined that specify when testing is required.

c. The test control program includes, as appropriate, proof tests before installation, pre-operational tests, post-maintenance tests, post-modification tests, and operational tests.

d. Test procedures are developed that include:

1. instructions and prerequisites to perform the test,

2. use of proper test equipment,

3. acceptance criteria, and

4. mandatory inspections as required.

e. Test results are evaluated to assure that test objectives and inspection requirements have been satisfied.

f. Unacceptable test results shall be evaluated.

g. Additional details concerning test control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

B. (continued)

9. Measuring and Test Equipment Control

a. A program is established and implemented to control the calibration, maintenance, and use of measuring and test equipment. Measuring and test equipment does not include permanently installed operating equipment or test equipment used for preliminary checks where data obtained will not be used to determine acceptability or be the basis for design or engineering evaluation. Additionally, calibration and control measures are not required for rulers, tape measures, levels and other such devices if normal commercial manufacturing practices provide adequate accuracy.

b. The types of equipment covered by the program (e.g., instruments, tools, gages, and reference and transfer standards) are defined in procedures.

c. Measuring and test equipment is calibrated at specified intervals or immediately before use on the basis of the item's required accuracy, intended use, frequency of use, and stability characteristics and other conditions affecting its performance.

d. Measuring and test equipment is labeled, tagged, or otherwise controlled to indicate its calibration status and to ensure its traceability to calibration test data.

e. Measuring and test equipment is calibrated against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated or, when this is not possible, have an accuracy that ensures the equipment being calibrated will be within the required tolerance.

f. If nationally recognized standards exist, calibration standards are to be traceable to them. Except where calibration standards with the same accuracy as the instruments being calibrated are shown to be adequate for the requirements, calibration standards are to have a greater accuracy than the standards being calibrated.

g. Measuring and test equipment found out of calibration is tagged or segregated. The acceptability shall be determined of items measured, inspected, or tested with an out-of-calibration device.

B.9 (continued)

h. Additional details concerning measuring and test equipment control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.30, 1.33, 1.94, 1.116, and 1.123).

10. Inspection, Test, and Operating Status

a. The status of required inspections and tests and the operating status of items is verified before release, fabrication, receipt, installation, test, and use, as applicable. This verification is to preclude inadvertent bypassing of inspections and tests and to prevent inadvertent operation of controlled equipment.

b. The application and removal of inspection, test, and operating status indicators are controlled in accordance with procedures.

c. Additional details concerning inspection, test, and operating status control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

11. Special Process Control

a. A program is established and implemented to ensure that special processes are properly controlled.

b. The criteria that establish which processes are special are described in procedures. The following are special processes:

1. welding,

2. heat treating,

3. NDE (Non-Destructive Examination),

4. chemical cleaning, and

5. unique fabricating or testing processes which require in-process controls.

c. Special processes are accomplished by qualified personnel, using appropriate equipment, and procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

B.11 (continued)

d. Additional details concerning special process control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

12. Inspection

a. A program is established and implemented for inspections of activities in order to verify conformance to the documented instructions, procedures and drawings for accomplishing the activity. The inspection program may be implemented by or for the organization performing the activity to be inspected.

b. Provisions to ensure inspection planning is properly accomplished are to be established. Planning activities are to identify the characteristics and activities to be inspected, the inspection techniques, the acceptance criteria, and the organization responsible for performing the inspection.

c. Provisions to identify inspection hold points, beyond which work is not to proceed without the consent of the inspection organization, are to be defined.

d. Inspection results are to be documented by the inspector and reviewed by qualified personnel.

e. Unacceptable inspection results shall be evaluated and resolved in accordance with procedures.

f. Inspections are performed by qualified personnel other than those who performed or directly supervised the work being inspected. While performing the inspection activity the inspectors functionally report to the associated manager responsible for quality assurance or a manager responsible for materials, purchasing, and contracts as appropriate.

g. Additional details concerning inspections may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.58).

B. (continued)

13. Corrective Action

a. Procedures shall provide for identification, evaluation, and resolution of conditions adverse to quality.

b. Reworked, repaired, and replacement items are to be inspected and tested in accordance with the original inspection and test requirements or specified alternatives.

c. Additional details concerning corrective action activities may be found in Section A.6 and the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

14. Document Control

a. A program is established and implemented to control the development, review, approval, issue, use, and revision of documents.

b. The scope of the document control program includes:

1. safety analysis report,
2. design documents,
3. procurement documents,
4. Technical Specifications,
5. procedures, manuals, and plans,
6. corrective action documents, and
7. other documents as defined in procedures.

c. Revisions of controlled documents are reviewed for adequacy and approved for release by the same organization that originally reviewed and approved the documents or by a designated organization that is qualified and knowledgeable.

d. Copies of controlled documents are distributed to and used by the person performing the activity.

B.14 (continued)

e. The distribution of new and revised controlled documents is in accordance with procedures. Superseded documents are controlled.

f. Additional details concerning document control may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.33).

15. Records

a. A program is established and implemented to ensure that sufficient records of items and activities (e.g., design, engineering, procurement, manufacturing, construction, inspection and test, installation, pre-operation, startup, operations, maintenance, modification, decommissioning, and audits) are generated and maintained to reflect completed work.

b. The program provides provisions for the administration, receipt, storage, preservation, safekeeping, retrieval, and disposition of records.

c. Additional details concerning record requirements may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guide 1.88).

C. AUDIT

1. Methodology

a. Personnel responsible for carrying out audits are maintained cognizant of day-to-day activities by the ongoing involvement in the quality assurance program requirements so that they can act in a management advisory function.

b. Organizations performing audits are to be technically and performance oriented commensurate with the activity being reviewed.

c. Personnel performing audits have no direct responsibilities in the area they are assessing.

d. Audits are accomplished using instructions, procedures, or other appropriate means that are of a detail commensurate with the activity's complexity and importance to safety.

C. (continued)

2. Performance

a. A program of planned and periodic audits is established and implemented to confirm that activities affecting quality comply with the QAPM and that the QAPM has been implemented effectively. Audit frequencies will be implemented as required by the applicable Code of Federal Regulations, safety analysis report, and commitments by various correspondence to the NRC. Audits will be conducted at a frequency in accordance with either Section C.2.a.1 or Section C.2.a.2 below.

1. Audit frequencies will be determined in accordance with a performance based audit scheduling program. The scheduling program, through an expert panel, uses assessment indicators to identify and schedule audits based on performance results and importance of the activity relative to safety. Potential audit subject areas are periodically assessed against appropriate performance criteria. From these reviews a determination is made in regard to the depth, scope, and scheduling of specific audits. Functional areas important to safety are assessed annually (± 25%) to identify strengths and weaknesses (if applicable) to determine the level and focus of independent oversight activities for the upcoming year. The basis for the assessment shall include the results of audits and surveillance, NRC inspections, LERs, self-assessments, and applicable conditions reports (e.g., non-conformance and corrective action reports). Personnel changes, change/increase in functional area responsibilities, industry operating experience, and INPO evaluations will also be considered. Each area will be assigned a rating with a comparison to previous years. This assessment will be documented, reviewed, and approved by quality assurance management.

This document is considered a quality assurance record and will be available for NRC review. Audit subject areas of Section C.2.a.2 shall continue to be audited on the frequencies designated unless expert panel judgment, based on performance results, determines such an audit to be unnecessary. In such cases the expert panel basis shall be documented.

C.2.a. (continued)

2. Audit schedules assure that the following areas are audited at the indicated frequencies, or more frequently as performance dictates.

   a. The conformance of each unit's operation to provisions contained within the Technical Specifications and applicable license conditions is audited at least once every 24 months.

   b. The performance, training, and qualifications of the entire staff is audited at least once every 24 months.

   c. The results of actions taken to correct deficiencies occurring in unit equipment, structure, systems, or method of operation that affect nuclear safety is audited at least once every 24 months.

   d. The performance of activities required by the QAPM to meet the criteria of 10 CFR 50, Appendix B is audited at least once every 24 months.

   e. The Offsite Dose Calculations Manual and Process Control Program and implementing procedures is audited at least once every 24 months.

   f. The radiological environmental monitoring program and the results thereof is audited at least once every 24 months.

   g. A fire protection and loss prevention program inspection and audit shall be performed using either off-site licensee personnel or an outside fire protection firm at least once 12 months.

   h. The fire protection program and implementing procedures at least once 24 months.

   i. A fire protection and loss prevention program inspection and audit shall be performed using an outside fire consultant at least once 36 months.

b. Audits shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items and a review of documents and records, as applicable.

C.2 (continued)

c. Audits shall be performed in accordance with approved written procedures or checklists. Items from previous audits shall be reviewed and reaudited, as appropriate. The checklists are used as guides to the auditor.

d. Scheduling and resource allocation are based on the status and safety importance of the activity or process being assessed.

e. Scheduling is dynamic and resources are supplemented when the effectiveness of the quality assurance program is in doubt.

f. Audit reports are written and distributed to the appropriate levels of management for review. Follow-up action, including re-look at deficient areas, is initiated as deemed appropriate.

g. Implementation of delegated portions of the quality assurance program is assessed.

h. Audits are conducted using predetermined acceptance criteria.

i. Additional details concerning audits may be found in the Regulatory Guides and associated Standards as committed to in Section A.7 and Table 1 (e.g., Regulatory Guides 1.33 and 1.144).

D. INDEPENDENT SAFETY REVIEW

1. Description

a. Independent safety review is performed to meet the individual unit's commitment to NUREG-0737, Section I.B.1.2, "Independent Safety Engineering Group," as described in the unit's safety analysis report.

Table 1
Regulatory Commitments

A. Regulatory Guide 1.8 Revision 1, dated September 1975

		Clarification/Exception
1.	General	Qualification requirements for personnel will meet ANSI/ANS 3.1 1978 except where exception to ANSI N18.1 or to this Standard is identified in the applicable unit's Technical Specifications. Individuals filling positions who met the previous commitment at the time of implementation of this commitment can be considered to meet any more restrictive aspects of the requirements of this commitment for that position without further review and documentation.
2.	General	The following qualifications may be considered equivalent to a bachelor's degree: a. 4 years of post secondary 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. Years of experience used to meet the education requirements as allowed by this exception shall not be used to also meet the experience requirements.

Table 1
Regulatory Commitments

B. Regulatory Guide 1.30, dated August 1972

		Clarification/Exception
1.	ANSI N45.2.4 General	ANSI N45.2.4 identifies various tests to be performed. The applicability of these tests will be determined as discussed in QAPM Section B.8 and based upon the significance of change or modification.
2.	ANSI N45.2.4 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this Section.
3.	ANSI N45.2.4 Section 5.2	In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.
4.	ANSI N45.2.4 Section 6.2.1	The last sentence of this section states: "Items requiring calibration shall be tagged or labeled on completion indicating date of calibration and identity of the person that performed the calibration." Instead of requiring the tagging or labeling of all equipment this statement is changed to require the equipment to be suitably marked to indicate the date of the next required calibration and the identity of the person that performed the calibration.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 Revision 2, dated February 1978

		Clarification/Exception
1.	Section C.1	Entergy will provide procedures for the guide's Appendix A activities as discussed. However, Entergy does not consider all activities listed to be "safety-related" (e.g., activities in 7.e).
2.	Section C.4	This section establishes minimum 2 year audit frequency for all safety related functions and recommends audit frequencies specific to Corrective Action, Facility Operation, and Staff Performance, Training, and Qualifications. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
3.	ANSI N18.7 Section 1	Sentences 4 and 5 state, "However, applicable sections of this standard should be used as they apply to related activities. Activities included are: Design Changes, Purchasing, Fabricating..." With regard to radioactive material transportation activities, Entergy will only implement the requirements associated with those activities conducted in accordance with the applicable NRC Quality Assurance Program Approval for Radioactive Material Packages.
4.	ANSI N18.7 Section 4.3.1	The specific areas of experience described in this section is not applicable to the on-site safety review committee but the committee must be comprised of site operating or engineering supervisory personnel. Additionally, the off-site safety review committee need contain experience in only a majority of the areas.
5.	ANSI N18.7 Section 4.3.2.3	The statement that "no more than a minority of the quorum shall have line responsibility for the operation of the plant" is not applicable to the on-site safety review committee.
6.	ANSI N18.7 Section 4.3.4(2)	Reviews associated with changes to the technical specifications will be performed in accordance with Section 4.3.4(3) instead of this section.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
7.	ANSI N18.7 Section 4.3.4(3)	Revision to proposed Technical Specification changes only require review in accordance with this section when the revision involves a significant change to the technical basis for the proposed change.
8.	ANSI N18.7 Section 4.3.4(4)	In place of the requirements of this section, the on-site and off-site safety review committees shall review facility operations to detect potential nuclear safety hazards and all reports made in accordance with 10 CFR 50.73.
9.	ANSI N18.7 Section 4.3.4(5)	Examples of the matters reviewed by the on-site safety review committee in accordance with this section are the following: a. new and revised station administrative procedures and b. changes to the Emergency Plan (except editorial changes).
10.	ANSI N18.7 Section 4.5	This section establishes minimum 2 year audit frequency for all safety related functions. Entergy will perform audits at frequencies as discussed in QAPM Section C.2.a instead of this section.
11.	ANSI N18.7 Section 4.5	The independent review body discussed in this section is the off-site safety review committee.
12.	ANSI N18.7 Section 5.1	Instead of the requirements of this section to have a summary document, a method of cross referencing these requirements to the implementing procedures will be maintained.
13.	ANSI N18.7 Section 5.2.2	The person who holds a senior reactor operators license for the affected unit and approves a temporary change to a procedure is not required to be in charge of the shift.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
14.	ANSI N18.7 Section 5.2.2	In addition to the temporary procedure change process described for changes which clearly do not change the intent of a procedure, temporary procedure changes which may change the intent of a procedure may be made following the process described in this section. Except that the person normally responsible for approving revisions to the procedure is the approval authority for the change.
15.	ANSI N18.7 Section 5.2.6	Instead of the requirements of this section concerning non-conforming conditions, non-conforming conditions will be evaluated and controlled in accordance with the corrective action program.
16.	ANSI N18.7 Section 5.2.6	The requirement of the fifth paragraph of this section to have a log of the status of temporary modifications is not applicable to temporary modifications for routine tasks installed in accordance with procedures. These procedures shall provide assurance that approvals are obtained, temporary modification activities are independently verified by an individual cognizant of the purpose and the effect of the temporary modification, and that activities are adequately documented to indicate the status of the temporary modification.
17.	ANSI N18.7 Section 5.2.7.1	This section will be implemented by adding the words "Where practical" in front of the first and fourth sentences of the fifth paragraph. For modifications where the requirements of the fourth sentence are not considered practical, a review in accordance with the provisions of 10 CFR 50.59 will be conducted.
18.	ANSI N18.7 Section 5.2.8	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.	ANSI N18.7 Section 5.2.9	The requirements of the Physical Security Plan shall be implemented in place of these general requirements.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
20.	ANSI N18.7 Section 5.2.13.1	Consistent with ANSI N45.2.11 Section 7.2, minor changes to documents, such as inconsequential editorial corrections, or changes to commercial terms and conditions may not require that the revised document receive the same review and approval as the original documents.
21.	ANSI N18.7 Section 5.2.14	Where marking, tagging, or physical separation of the non-conforming item is not feasible, the non-conforming item may be controlled by the use of appropriate documentation.
22.	ANSI N18.7 Section 5.2.15	Required procedure reviews following the occurrences discussed in Section 5.2.15, paragraph 3, sentence 3, are determined and controlled in accordance with the QAPM Section A.6 instead of this section.
23.	ANSI N18.7 Section 5.2.15	This section requires plant procedure review by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable. Instead of this review, controls are in effect to ensure that procedures are reviewed for possible revision upon identification of new or revised source material potentially affecting the intent of procedures.
24.	ANSI N18.7 Section 5.3.9	Instead of the requirements of this section, the format and content of the emergency operating procedures follow the applicable NRC approved format for the specific unit.
25.	ANSI N18.7 Section 5.3.9.3	Entergy's NRC accepted Emergency Plan will be implemented in lieu of the requirements in this section.

Table 1
Regulatory Commitments

D. Regulatory Guide 1.37, dated March 1973

		Clarification/Exception
1.	General	Instead of using the cleanliness level classification system of ANSI N45.2.1, the required cleanliness for specific items and activities is addressed on a case-by-case basis. Cleanliness is maintained, consistent with the work being performed to prevent introduction of foreign material. As a minimum, cleanliness inspections are performed prior to system closure and such inspections are documented.
2.	Section C.3	The water quality for final flushes of fluid systems and associated components is at least equivalent to the quality of the operating system water, except for the oxygen and nitrogen content.
3.	Section C.4	As an alternate to the requirements of this section, contamination levels in expendable products may be based upon safe practices and industrial availability with documented engineering evaluations. Contaminant levels are controlled such that subsequent removal by standard cleaning methods results in the achievement of final acceptable levels which are not detrimental to the materials.
4.	ANSI N45.2.1 Section 5	Any nonhalogenated material may be used which is compatible with the parent material not just plastic film.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 Revision 2, dated May 1977

		Clarification/Exception
1.	ANSI N45.2.2 Section 3.2	Storage of an item in a higher level storage area meets the lower level storage requirements.
2.	ANSI N45.2.2 Section 3.2	As an alternate to the requirements in Section 3.2.1 items (4), (5), and 7, Section 3.2.2, Section 3.2.3 item (1), and Section 3.2.4 item (2), the storage atmosphere may be controlled such that it is free of harmful contaminants in concentration that could produce damage to the stored item and protecting weld end preparations and threads by controlling the manner in which the item is stored.
3.	ANSI N45.2.2 Section 3.7.1	Cleated, sheathed boxes may be used up to 1000 lb. rather than 500 lb. as specified in 3.7.1(1). Special qualification testing may be required for loads over 1000 lb.
4.	ANSI N45.2.2 Section 3.7.2	Skids and runners will normally be fabricated from a minimum 2 X 4 inch nominal lumber size 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.
5.	ANSI N45.2.2 Section 4.3.4	Inspections of packages and/or preservative coatings are made immediately prior to loading rather than after loading.
6.	ANSI N45.2.2 Section 5.2.1	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. 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 provides adequate documentation of completion of the shipping damage inspection. Any non-conformances noted will be documented and dispositioned. Persons performing the visual scrutiny during unloading are not considered to be performing an inspection function as defined under Reg. Guide 1.74; therefore, while they will be trained to perform this function, they may not be certified (N45.2.6) as an inspector.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
7.	ANSI N45.2.2 Section 5.2.2	The second division of this subsection requires six additional inspection activities if an item was not inspected or examined at the source. Entergy 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). Instead of the requirement that receiving inspections be performed in an area equivalent to the level of storage required for the item, receiving inspections will be performed in a manner and in an environment which does not endanger the requisite quality of an item. The receiving inspection's location environmental controls may be less stringent than storage environmental requirements for that item; however, the short time spent in the less stringent receiving inspection area shall be of such duration that it will not adversely affect the item being received.
8.	ANSI N45.2.2 Section 5.2.3	The "Special Inspection" procedure is not required to be attached to the item or container but shall be readily available to inspection personnel.
9.	ANSI N45.2.2 Section 6.2.1	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 may not be provided.
10.	ANSI N45.2.2 Section 6.2.4	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."

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
11.	ANSI N45.2.2 Section 6.2.5	The sentence is replaced with the following: " Exterminators or other appropriate measures shall be used to control animals to minimize possible contamination and mechanical damage to stored material. If evidence of animal activity is detected, a survey or inspection will be utilized to determine the extent of the damage."
12.	ANSI N45.2.2 Section 6.3.3	An alternate to the stated requirement is 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."
13.	ANSI N45.2.2 Section 6.4.2	Care of items in storage shall be exercised in accordance with the following: "Types of components that could require maintenance while in storage shall be identified and evaluated for specific maintenance requirements. Maintenance activities 6.4.2 (6) through 6.4.2 (8) listed in this requirement shall be considered during this evaluation and any deviations shall be justified and documented."
14.	ANSI N45.2.2 Section 6.5	The last sentence of this section is not applicable to the operations phase.
15.	ANSI N45.2.2 Section 6.6	Entergy will comply with this section's requirements with the clarification that, for record purposes, only the access of personnel without key cards into indoor storage areas shall be recorded. Unloading or pickup of material shall not be considered "access," nor shall inspection by NRC or other regulatory agents, nor shall tours by nonlicensee employees who are accompanied by licensee employees.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38 (continued)

		Clarification/Exception
16.	ANSI N45.2.2 Section 7.3	Re-rating hoisting equipment will be considered only when 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 and the test lift load. At all times, the codes governing re-rating of hoisting equipment must be observed.
17.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.1	During printing of the standard, a transposition occurred between the last sentence of A3.4.1(4) and A3.4.1(5). The correct requirements are: (4) "However, preservatives for inaccessible inside surfaces of pumps, valves and pipe systems containing reactor coolant water shall be the water flushable type." (5) "The name of the preservative used shall be indicated to facilitate touch up."
18.	ANSI N45.2.2 Appendix (A-3) Section A.3.4.2	There may be cases involving large or complex shaped items for which an inert or dry air purge is provided, rather than a static gas blanket, in order to provide adequate protection due to difficulty of providing a leak proof barrier. In these cases, a positive pressure purge flow may be utilized as an alternate to a leakproof barrier.
19.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.1	Instead of the requirement for non-metallic plugs and caps to be brightly colored, non-metallic plugs and caps shall be an appropriately visible color.
20.	ANSI N45.2.2 Appendix (A-3) Section A.3.5.2	This paragraph limits halogen and sulfur content of tape. The use of tapes containing greater amounts of halogens than those identified will be allowed after appropriate evaluation; however, the quantities shall not be such that harmful concentrations could be leached or released by breakdown of the compounds under expected environmental conditions.

Table 1
Regulatory Commitments

E. Regulatory Guide 1.38(continued)

		Clarification/Exception
21.	ANSI N45.2.2 Appendix (A-3) Section A.3.7.1	In lieu of A3.7.1(3) and (4), Entergy will comply with the following: Fiberboard boxes shall be securely closed either with a water resistant adhesive applied to the entire area of contact between the flaps, or all seams and joints shall be sealed with not less than 2-inch wide, water resistant tape.
22.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	Instead of the requirement that container markings appear on a minimum of two sides of the container, preferably on one side and one end, Entergy will comply with the following: Containers are adequately marked for storage, identification, and retrieval. Multiple marking requirements are imposed, where necessary.
23.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the requirement that container markings be no less than 3/4" high, Entergy will comply with the following: Container markings are of a size which permits easy recognition.
24.	ANSI N45.2.2, Appendix (A-3) Section A.3.9	Instead of the specific container marking requirements, Entergy will comply with the following: The information required in container marking is evaluated on a case-by-case basis.
25.	ANSI N45.2.2 Appendix (A-3) Section A.3.9	The last paragraph of A.3.9 could be interpreted as prohibiting any direct marking on bare austenitic stainless steel and nickel alloy metal surfaces. As a alternate, paragraphs A.3.9.(1) and (2) may be used to control marking on the surface of austenitic stainless steels and nickel base alloys based on documented engineering evaluations. Contamination levels are controlled such that the material used for marking is not detrimental to the materials marked.

Table 1
Regulatory Commitments

F. Regulatory Guide 1.39 Revision 2, dated September 1977

		Clarification/Exception
1.	ANSI N45.2.3 General	The ANSI five level zone designation system may not be utilized, but the intent of the standard will be met for the areas of housekeeping, plant and personnel safety, and fire protection.
2.	ANSI N45.2.3 Section 3.1	This section is not applicable.
3.	ANSI N45.2.3 Section 3.2.3	The Fire Protection Program shall be used in lieu of the general requirements in this section.
4.	ANSI N45.2.3 Section 3.3	The first paragraph is not applicable to the operations phase.
5.	ANSI N45.2.3 Section 3.4	This section is not applicable.
6.	ANSI N45.2.3 Section 3.5	Subparagraph (1) is not applicable to the operations phase; (2), (3), and (4) will be implemented.

Table 1
Regulatory Commitments

G. Regulatory Guide 1.58 Revision 1, dated September 1980

		Clarification/Exception
1.	General	Entergy 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 the Technical Specifications or other QAPM commitment requirements.
2.	General	Certification of inspectors in accordance with this guide is approved by a manager responsible for quality assurance except for inspectors performing inspections as part of the procurement process. These inspectors may be approved by a manager responsible for materials, purchasing, and contracts.
3.	ANSI N45.2.6 Section 1.2	Paragraph 4 requires that the standard be imposed on personnel other than licensee employees; the applicability of this standard to suppliers will be documented and applied, as appropriate, in procurement documents for such suppliers.
4.	ANSI N45.2.6 Section 1.2	The requirements of this standard do not apply to personnel using later editions of ASNT contained within 10CFR50.55a approved ASME editions or addenda.
5.	ANSI N45.2.6 Section 2.5	This section's requirements are clarified 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, none are considered necessary.
6.	ANSI N45.2.6 Section 3.5	Entergy reserves the right to use personnel who do not meet these experience requirements but have shown capability through training and testing or capability demonstration.

Table 1
Regulatory Commitments

H. Regulatory Guide 1.64 Revision 2, dated June 1976

		Clarification/Exception
1.	ANSI N45.2.11 Section 5.2.4	For the documentation of inter-disciplinary design reviews, there must be documented evidence of the acceptability of design documents, or portions thereof, prior to release (material, stress, physics, mechanical, electrical, concrete, etc.). Indication of the positive concurrence of those who determine the design acceptability relative to their respective disciplinary area of concern should be on the document or on a separate form traceable to the document. A document that indicates the reviewer's comments need not be retained.

Table 1
Regulatory Commitments

I. Regulatory Guide 1.74, dated February 1974

		Clarification/Exception
1.	ANSI N45.2.10, Section 2	Definitions for "Certificate of Conformance" and "Certificate of Compliance" will be exchanged based upon the guidance in ANSI N45.2.13 Section 10.2.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

		Clarification/Exception
1.	RG 1.88 Section C	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of N45.2.9 Section 5.6 or the discussions in this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.
2.	ANSI N45.2.9 Section 1.4	Documents are considered completed when they are "completely filled out" (i.e., when sufficient information is recorded to fulfill the record's intended purpose) and the adequacy of the document (e.g., legibility) has been accepted by the document control or records management organizations or designees.
3.	ANSI N45.2.9 Section 3.2.2	The requirements for an index discussed in this section are considered to only require that a method of retrieving the record and controlling the identified information be established.
4.	ANSI N45.2.9 Section 5.4.2	Instead of the requirements of this section, Entergy will comply with the following: Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers. Methods other than binders, folders, or envelopes (e.g., dividers or boxes) may be used to organize records for storage. This section is not applicable to special processed records controlled in accordance with Section 5.4.3 when the requirements of this section are not appropriate for the record type.

Table 1
Regulatory Commitments

J. Regulatory Guide 1.88 Revision 2, dated October 1976

		Clarification/Exception
5.	ANSI N45.2.9 Section 5.4.3	Instead of the requirements of this section, Entergy will comply with the following: 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 with appropriate consideration of packaging and storing recommendations as provided by the manufacturer of these materials.
6.	ANSI N45.2.9 Section 5.5	Routine general office and nuclear site security systems and access controls are provided; no special security systems are required to be established for record storage areas.
7.	ANSI N45.2.9 Section 5.6	Entergy will meet the requirements of ANSI/ ASME NQA-1-1983, Supplement 17S-1 Section 4.4 in lieu of this section for Records Storage Facilities with the clarification that penetrations providing fire protection, lighting, temperature/humidity control, or communications are acceptable as long as the penetration maintains the required fire resistance. Except that as an alternate to these requirements non-permanent records (e.g., 3 years retention records) may be stored and maintained by the originating organization in one-hour minimum fire rated file cabinets located in environmentally controlled facilities that have suitable fire protection. Suitable fire protection is provided by either an automatic sprinkler system or a combination of two or more of the following: 1) automatic fire alarms, 2) hose stations, or 3) portable extinguishers.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 Revision 1, dated April 1976

		Clarification/Exception
1.	ANSI N45.2.5 Section 2.5.2	The last sentence requires that all items inspected with maintenance and test equipment which is found to be out of calibration shall be considered unacceptable. Entergy will comply with QAPM Section B.9.g as an alternate. QAPM Section B.9.g requires an evaluation to determine the validity of previous measurements.
2.	ANSI N45.2.5 Section 4.5	When using ACI-305-72 and ACI-306-66, Entergy may apply the following requirements: PLACING TEMPERATURES OF CONCRETE A. During hot weather concreting, placing temperatures of concrete will be limited to the following: 1) Concrete members less than 3 feet in least dimension will not exceed 90°F; 2) Concrete members from 3 feet to 6 feet in least dimension will not exceed 70°F; and 3) Concrete members more than 6 feet in least dimension will have placing temperature as near 50°F as can be obtained by use of ice as necessary up to 100 percent of adding mixing water; and by shading aggregate and sprinkling the coarse aggregate the day it is to be used. Care will be taken so that no unmelted ice remains in the concrete at the end of the mixing period. B. During cold weather concreting: In heating the water and aggregate, live steam to heat the fine and coarse aggregate shall not be used. The permissible range for concrete temperature shall be as follows: 1) Sections less than 3 feet in least dimensions 55°F to 75°F; and 2) Mass concrete 3 feet or more in least dimension 45°F to 65°F. The mixing water and aggregate will be purchased as required. The materials will be free of ice, snow and frozen lumps before they enter the mixer.
3.	ANSI N45.2.5 Table B	As an alternate to daily testing grout for compressive strength, for prepackaged shelf item, non-shrink grout, the grout's compressive strength tests may be performed once on each batch of non-shrink grout received, rather than each day grout is placed.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 (continued)

		Clarification/Exception
4.	ANSI N45.2.5 Section 4.8	For the performance of correlation tests, the requirements of this standard may be modified as discussed below: Table B, REINFORCING STEEL: In-process testing of reinforcing steel will include the mechanical properties of yield strength, tensile strength and percent elongation on full size specimens for each bar size for each 50 tons or fraction thereof from each mill heat. Bend tests are performed during material qualification testing only, except as noted below for bar sizes #14 through #18. Table A, "Required Qualification Tests" as applied to reinforcing steel will include bend tests as required by ASTM A615 and summarized in the following: a) For bar sizes #3 through #11, one full size specimen from largest bar size rolled from each mill heat, unless material from one heat differs by three or more designation numbers. When this occurs, one bend test shall be made from both the highest and lowest designation number of the deformed bars rolled; b) For bar sizes #14 through #18, Supplementary Requirements S1 of ASTM A615 will be applied, i.e., one fullsize specimen for each bar size for each mill heat. If supplementary requirements are not followed for mill tests, they will be applied as in-process tests. In-process test specimens may be selected at the rebar fabrication shop, prior to start of fabrication of the rebar from the heat or fraction thereof represented by the test specimen. Acceptance criteria for any failed test (qualifications as well as in-process) may be the same as that for tensile tests specified in Subarticle CC-2331.2 of ASME Section III, Div. 2 Code (1975). This states that if a test specimen fails to meet the specified strength requirements, two (2) additional specimens from the same heat and of the same bar size would be tested, and if either of the two additional specimens fails to meet the specified strength requirements, the material represented by the tests would be rejected for the specified use. Alternative use of rejected material under strict control may be subject to evaluation by engineering.

Table 1
Regulatory Commitments

K. Regulatory Guide 1.94 (continued)

		Clarification/Exception
5.	ANSI N45.2.5 Section 4.9	Entergy may interpret the terms "horizontal, vertical and diagonal bars" to apply respectively to the following types of splice positions: a. Horizontal, including 10° to horizontal; b. Vertical, including 10° to vertical; and c. 45° angle, including 10° to 80° angle. The words "splicing crew" are interpreted to refer to all project members that are actively engaged in preparing and assembling cadweld mechanical splices at the final splice location. Separate test cycles will be established for each bar size and each splice position.
6.	ANSI N45.2.5 Section 5.5	Entergy will comply with inspection requirements of the applicable welding codes and any exceptions instead of this section.

Table 1
Regulatory Commitments

L. Regulatory Guide 1.116 Revision 0-R, dated June 1976

		Clarification/Exception
1.	ANSI N45.2.8 Section 3	Documented routine inspections and audits of the storage area may be performed instead of the requirements of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 Revision 1, dated July 1977

		Clarification/Exception
1.	RG 1.123 Paragraph C.6.e	This paragraph shall be implemented as originally written in N45.2.13 (i.e., with the verb "should" instead of the verb "shall"). Entergy retains the ultimate responsibility for performance of purchased equipment. The appropriate engineering discipline will exercise this management/engineering prerogative with respect to the final decision on post installation test requirements.
2.	ANSI N45.2.13 Section 1.2.2	Item c is an option which may be used to assure quality; however, any option given in 10 CFR 50 Appendix B, Criterion VII as implemented by the QAPM may also be used.
3.	ANSI N45.2.13 Section 1.3	Instead of the definition provided for QA Program Requirements, Entergy will comply with the following: "Those individual requirements of the QAPM which, when invoked in total or in part, establish quality assurance program requirements for the activity being controlled. Although not specifically used in the QAPM, ANSI N45.2 may be imposed upon suppliers."
4.	ANSI N45.2.13 Section 3.1	The "same degree of control" is stipulated to mean "equivalent level of review and approval." The changed document may not always be reviewed by the originator; however, at least an equivalent level of management/supervision shall review and approve any changes.
5.	ANSI N45.2.13 Section 3.1	Changes to procurement documents which are changes in quantity, estimated price, cost codes, taxes, format or editorial changes that do not affect the quality of the item or service do not require an equivalent level of review and approval as the original document.
6.	ANSI N45.2.13 Section 3.4	The requirements of the QAPM will be implemented instead of this section.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 (continued)

		Clarification/Exception
7.	ANSI N45.2.13 Section 4.2	Supplier evaluations may be performed any time prior to placing the purchased item in service.
8.	ANSI N45.2.13 Section 8.2 Item b	Non-conformance notices for conditions described in this section are only required to be submitted to Entergy when the non-conformance could adversely affect the end use of an item relative to safety, interchangeability, operability, reliability, integrity or maintainability.
9.	ANSI N45.2.13 Section 10.2 Item d	The section states that the certificate should be attested to by a person who is responsible for this QA function whose function and position are described in the Purchaser's/Supplier's QA program. As an alternate to this requirement, Entergy will use the following: "The person attesting to a certificate shall be an authorized and responsible employee of the supplier, and shall be identified by the supplier."

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980

		Clarification/Exception
1.	RG 1.144 Section C.3.a.(2)	This section is not applicable.
2.	RG 1.144 Section C.3.b.(2)	In addition to the requirements of this section, previously evaluated and approved active suppliers for which auditing is not the selected method of source verification should be evaluated concurrent with the award of a contract. Regardless of the evaluation results, active suppliers (except those excluded under C.3.b(1)) are source verified (audit, surveillance or inspection) within two years prior to award of a contract or have source verification performed. Inactive suppliers are evaluated prior to supplying items or services. An audit shall be conducted if required to determine the acceptability of procured items or services (i.e. acceptability cannot be determined by receipt inspection or another method allowable under 10 CFR 50 Appendix B, Criterion VII).
3.	RG 1.144 Section C.3.b.(2)	Instead of the annual documented evaluation of suppliers discussed in this section, an ongoing evaluation of supplier performance is conducted which takes into account, where applicable, the other considerations of this section and paragraph of the Regulatory Guide.
4.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
5.	ANSI N45.2.12 Section 4.3.1	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 (continued)

		Clarification/Exception
6.	ANSI N45.2.12 Section 4.3.2.2	This subsection 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. Entergy will comply with an alternate sentence which reads: "When available, objective evidence shall be examined for compliance with QAPM requirements. If subjective evidence is used (e.g., personnel interviews) then the audit report must indicate how the evidence was obtained."
7.	ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences are only held when deemed necessary by quality assurance or when requested by the audited organization.
8.	ANSI N45.2.12 Section 4.3.3	Pre-audit and post-audit conferences may be fulfilled by a variety of communications, such as telephone conversation.
9.	ANSI N45.2.12 Section 4.4	Instead of the last sentence of the last paragraph of the section, Entergy will comply with the following: The audit report shall be issued within thirty working days after the last day of the audit. The last day of an audit shall be considered to be the day of the post-audit conference. If a post-audit conference is not held because it was deemed unnecessary, the last day of the audit shall be considered to be the date the post-audit conference was deemed unnecessary as documented in the audit report.
10.	ANSI N45.2.12 Section 4.5.1	The QAPM Section A.6 corrective action program may be used instead of these requirements as long as the appropriate time limits are applied to significant conditions adverse to quality. Also, no additional documentation is necessary if needed corrective actions are taken and verified prior to audit report issuance.

Table 1
Regulatory Commitments

O. Regulatory Guide 1.146 Revision 0, dated August 1980

		Clarification/Exception
1.	ANSI N45.2.23 Section 2.3.1.3	Holders of NRC-issued Reactor Operator/Senior Reactor Operator Licenses comply with the requirements of this section and may be awarded two credits.
2.	ANSI N45.2.23 Section 2.3.4	Prospective lead auditors shall demonstrate their ability to effectively implement the audit process and lead an audit team. They shall have participated in at least one audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively lead audits, licensee management may designate a prospective lead auditor as a "lead auditor".

Attachment 1
ANO Specific Requirements

INTRODUCTION

This attachment has been added to the QAPM to maintain compliance with ANO Technical Specifications (Units 1 and 2 TS 6.2.1.a) which requires that organizational details be identified in the QA Manual Operations (i.e., the QAPM).

Additionally, ANO Unit 1 TS 6.9.2.i refers to record retention requirements in Section 17 of the QA Manual Operations. In the QAPM the referenced record retention can be found in Table 1 Item J and the associated commitment to Regulatory 1.88 and ANSI N45.2.9.

Technical Specification changes have been requested for the ANO Unit 1 and ANO Unit 2 Technical Specifications to identify that the organizational details are contained in the safety analysis report consistent with the other Entergy plants and remove the record retention requirements. The QAPM will be revised to delete this attachment after the ANO Technical Specification changes have been approved.

1.0 ANO ORGANIZATION

1.1 SCOPE

This section describes the Nuclear Organizational structure and responsibilities for establishing and executing the QA Program for Arkansas Nuclear One, Units 1 & 2 (ANO) in compliance with 10CFR50, Appendix B and applicable licensing commitments identified in the Introduction. It also includes a description of the interfaces with other organizations which may be delegated the work of establishing and executing portions of the QA Program.

1.2 GENERAL RESPONSIBILITIES

The on-site responsibility for ANO, including quality assurance, lies with the Vice President, Operations ANO. He provides management assessment of the QA Program through review of reports generated by the Quality Organization and reports of NRC activities.

1.3 NUCLEAR ORGANIZATION

The Nuclear Organization, headed by the Vice President, Operations ANO is responsible for activities related to the operation of ANO. These activities include as a minimum: design, operation, maintenance, inservice inspection and test, modification and those additional activities discussed in this manual. The Vice President, Operations ANO, who reports to the Entergy Operations Executive Vice President and Chief Operating Officer, is responsible for the formulation, licensing, implementation and discharge of operating policies and

procedures relative to nuclear plant operations, nuclear quality and training. The Vice President, Operation ANO's duties include the following:

(1) Providing technical direction and administrative guidance to the:

a. General Manager, Plant Operations

b. Director, Nuclear Safety

c. Director, Quality

d. Director, Support

e. Director, Training & Emergency Planning

f. Manager, Modifications

(2) Providing priority of engineering tasks to the Director, Engineering

(3) Ensuring conformance to the QA Program by instituting the necessary procedures and instructions within the Nuclear Organization

(4) Providing for review and approval of design and engineering performed for ANO

(5) Providing for review and approval of procurement documents for equipment, material and services

(6) Providing for liaison between ANO and applicable regulatory agencies

(7) Providing and maintaining a qualified and suitable staff to carry out required departmental functions

(8) Assuming overall responsibility for the fire protection, emergency planning and radiation protection programs implemented at ANO

(9) Implementing the Entergy Operations, Inc. Welding Program

1.3.1 General Manager, Plant Operations

The General Manager, Plant Operations reports to the Vice President, Operations ANO and has direct responsibility for operating ANO in a safe, reliable and efficient manner. He is responsible for operating ANO in accordance with the provisions of the operating licenses. The General Manager, Plant Operations has the authority to shut down either unit if required. The General Manager, Plant Operations provides technical direction and administrative guidance to the:

(1) Plant Manager, Unit 1

(2) Plant Manager, Unit 2

(3) Manager, Radiation Protection/Chemistry

(4) Manager, Standards

1.3.1.1 Plant Managers, Unit 1 & 2

The Plant Managers, Unit 1 & 2 report to the General Manager, Plant Operations and are responsible for the actual operation of their assigned nuclear unit, the maintenance of plant equipment and facilities and the planning/ scheduling of plant work activities. The Plant Managers, Unit-1 & 2 provide technical direction and administrative guidance to:

(1) Manager, Operations, Unit-1 & 2

(2) Manager, Maintenance, Unit-1 & 2

(3) Project Manager, Outages, Unit-1 & 2

(4) Manager, System Engineering, Unit-1 & 2

1.3.1.1.1 The Managers, Operations, Unit-1 & 2 are responsible for directing the actual day-to-day operations of their assigned unit. They supervise each unit's operating staff and interface with the respective Managers, Maintenance, Unit-1 & 2 to accomplish operation-related maintenance activities. They are responsible for coordination of the daily review of operating surveillance tests and coordination of operation-related maintenance activities. The Managers, Operations, Unit-1 & 2 are also responsible for supervision of core refueling, which includes advance planning for the outage, plant preparation, equipment checkout and the refueling operations. The Managers, Operations each hold an NRC Senior Reactor Operator License. The Managers, Operations, Unit-1 & 2 provide technical direction and administrative guidance to the Superintendents, Shift Operations of their assigned unit.

1.3.1.1.1.1 The Superintendents, Shift Operations report to the applicable Manager, Operations and are responsible for the actual operation of the unit and for the activities of the Operators during their assigned shifts.

The Superintendent, Shift Operations is cognizant of operation activities being performed while on duty. The Superintendent, Shift Operations on duty has the authority to shut down the unit if, in his judgment, conditions warrant such action. The Superintendents, Shift Operations each hold an active Senior Reactor Operator License. The Superintendents, Shift Operations provide technical direction and administrative guidance to the:

(1) Control Room Supervisors (Holders of active Senior Reactor Operator License)

(2) Shift Engineers

(3) Control Board Operators (Holders of active Reactor Operator License)

(4) Waste Control Operators

(5) Auxiliary Operators

1.3.1.1.2 The Managers, Maintenance, Unit-1 & 2 report to the applicable Plant Manager and are responsible for the maintenance of plant equipment and facilities as defined by plant maintenance program implementing procedures and ensuring that maintenance of equipment is performed in compliance with applicable standards, codes, specifications and procedures. The Managers, Maintenance have responsibility for activities common to Unit 1 and Unit 2. The Managers, Maintenance, Unit 1 & 2 also coordinate operation-related maintenance activities with the applicable Managers, Operations, Unit-1 & 2 and are responsible to make repairs on any structure, system or component under their control.

1.3.1.1.3 The Project Managers, Outages Unit-1 & 2 report to the applicable Plant Manager and are responsible for management and direction of activities to prepare for and control scheduled and non-scheduled unit outages. The responsibilities include detailed planning, preparation and scheduling of refueling outages and other scheduled or forced outages requiring cold shutdown, and directing activities during outages.

1.3.1.1.4 The Managers, System Engineering, Unit-1 & 2, report to the applicable Plant Manager and are responsible for reactor,

performance, and system engineering activities required for the safe and efficient production of electricity. These activities include resolving plant related engineering issues that do not alter the system level design bases of the respective plants.

1.3.1.1.5 The planning and scheduling of plant work activities are executed under the ANO Plant Manager for Unit 1 & 2, respectively. The unit outage manager reports to the respective unit plant manager and is responsible for scheduling outage and non-outage work activities for that unit, supervising the scheduling staff, and interfacing with the respective unit maintenance manager, who has responsibility for planning and execution of plant work activities.

1.3.1.1.6 The Manager, Standards reports to the General Manager, Plant Operations and provides planning, direction, control and overall supervision to the Standards Department The Manager, Standards also provides planning, direction, control and overall supervision to the Fire Prevention, and Safety Sections, in operating and maintaining ANO. Responsibilities involve the supervision of personnel and daily work activities involving the safe, efficient and reliable operation of ANO. Responsibilities involve the development and administration of programs which support the capability of ANO to meet or exceed industry standards and regulatory requirements. Responsibilities also involve the Chairpersonship of the Plant Safety Committee which reviews the various aspects of operation, maintenance, modification and support to assure the safety of ANO.

1.3.1.2 Manager, Radiation Protection/Chemistry

The Manager, Radiation Protection/Chemistry reports to the General Manager, Plant Operations and is responsible for implementing the Nuclear Organization chemistry, radiation protection and health physics policies, programs, and procedures. The Manager, Radiation Protection/Chemistry is directly responsible for implementing controls which will minimize personnel radiation exposure (ALARA), minimize personnel contamination, minimize radwaste volume, and establish uniform procedures and methods for contamination control and radiation protection. This position is also responsible for implementing contracts, as required to maintain chemistry and radiochemistry parameters in specification and establish chemistry and radiochemistry controls conducive to maximizing plant life.

1.3.2 Director, Nuclear Safety

1.3.2.1 The Director, Nuclear Safety reports to the Vice President, Operations ANO and has overall responsibility for the management and oversight of NRC inspection activities, industry and in-house operation experiences, safety assessments, and interactions with the NRC regional and Washington, DC offices.

The Director, Nuclear Safety provides technical direction and administrative guidance to the:

(1) Supervisor, Licensing - Region

(2) Supervisor, Licensing - NRR

(3) Supervisor, Industry Events Analysis

(4) Supervisor, In-House Events Analysis and Assessment

1.3.2.2 Supervisor, Licensing - Region

The Supervisor, Licensing - Region reports to the Director, Nuclear Safety and is responsible for the following duties:

(1) Interfacing with on-site and regional regulatory agencies and the Director, Nuclear Safety pertaining to Licensing and regulatory matters

(2) Establishing and maintaining a system for monitoring Licensee Event Reports and NRC Inspection Reports

(3) Performing SAR updates

(4) Providing technical direction and administrative guidance to the Licensing Specialists

1.3.2.3 Supervisor, Licensing-NRR

The Supervisor, Licensing-NRR reports to the Director, Nuclear Safety and is responsible for the following duties:

(1) Interfacing with NRC, Washington, DC offices and the Director, Nuclear Safety pertaining to Licensing and regulatory matters

(2) Establishing and maintaining programs for the maintenance of Licensing Base Documents (Operating License, SAR, Technical Specification, Emergency Plan, QA Manual Operations) with the assistance of other department's expertise

(3) Responding to Generic Letters and Bulletins

(4) Reviewing NRC Correspondence (incoming and outgoing) and related industry documents to remain cognizant of activities that may affect ANO

(5) Providing evaluations and recommendations in meeting regulatory commitments

(6) Providing technical direction and administrative guidance to the Licensing Specialists

1.3.2.4 Supervisor, Industry Events Analysis

The Supervisor, Industry Events Analysis reports to the Director, Nuclear Safety and observes the nuclear industry for indicators and lessons learned which can be of use to correct existing ANO problems or to avoid problems others have experienced. The section assesses applicability of current industry issues to ANO and develops proposed action plans for consideration and implementation by line management. Inputs to this function are SOERs, SERs, O&MRs, SEE-IN documents, NRC Information Notices and vendor notifications (including 10CFR21 reports). Additionally, this section is the interface for reporting to Nuclear Network concerning events that occur at ANO.

1.3.2.5 Supervisor, In-House Events Analysis and Assessment

The Supervisor, In-House Events Analysis and Assessment reports to the Director, Nuclear Safety and has the responsibility for administration of ANO's primary corrective action program, the Condition Reporting System. This responsibility includes:

(1) Reviewing identified conditions adverse to quality in order to recommend appropriate dispositions to plant management

(2) Assisting in the performance of root cause determinations to ensure their adequacy

(3) Reviewing the actions taken to resolve conditions and taking action to ensure resolution of the condition

(4) Maintaining a tracking system and reporting mechanism for identified conditions

Additionally, the Supervisor, In-House Events Analysis and Assessment is responsible for providing assessments of plant and industry operating experiences, oversight of plant experiences, oversight of selected key station programs, and assisting station management in monitoring and evaluating ANO performance to ensure that effective management programs are developed, implemented and maintained to achieve the goals and Standards of Excellence as prescribed by senior management. This responsibility is accomplished through a variety of methods including: evaluating plant programs or functional areas, independent investigations of selected plant events or conditions, and a periodic assessment of overall plant activities. The In-House Events Analysis and Assessment section provides independent, objective assessments (outside the traditional auditing role) of the overall effectiveness of nuclear programs to help assure that performance expectations are being met. The inputs to this process include the assessment of prior and current ANO performance contrasted against, comparable industry performance, the Standards of Excellence identified by INPO, and the evaluation of industry strengths and good practices for applicability to ANO, and other applicable nuclear industry requirements. The Supervisor, In-House Events Analysis and Assessment manages the plant operation experience review program in accordance with INPO guidelines.

1.3.3 Director, Quality

The Director, Quality reports to the Vice President, Operations ANO and has overall responsibility for the Quality Organization which performs reviews, analysis, surveillance, inspection, nondestructive examination and audit functions during the operational phase of ANO. The Quality Organization is also independent of plant operations and has sufficient independence from cost and schedule when opposed to safety considerations. The Director, Quality has direct access to all management levels, which assures his staff the ability to: identify quality problems; initiate, recommend or provide solutions through designated channels; and verify implementation of solutions.

The Director, Quality provides technical and administrative guidance to:

(1) Coordinator, Quality

(2) Supervisor(s), Quality Assurance

(3) Supervisor, Quality Control

(4) Supervisor, NDE

Duties and responsibilities of the Director, Quality include the following:

(1) Technical direction, administrative guidance and supervision to the Coordinator, Quality; Supervisor(s), Quality Assurance; Supervisor, Quality Control; and Supervisor NDE

(2) Approval of the QA Manual Operations and revisions thereto

(3) Approval of QA/QC and NDE procedures and revisions thereto as established within Quality procedures

1.3.3.1 Coordinator, Quality

The Coordinator, Quality reports to the Director, Quality. Duties and responsibilities of the Coordinator, Quality include assisting the Director, Quality with his duties and responsibilities.

1.3.3.2 Supervisor(s), Quality Assurance

The Supervisor(s), Quality Assurance reports to the Director, Quality. Duties and responsibilities of the Supervisor(s), Quality Assurance include the following:

(1) Developing the QA Program requirements for operation, maintenance, and modification activities related to safety-related (Q-listed) systems, structures and components

(2) Auditing of the quality activities as described in this manual

(3) Providing to the Director, Quality, on an annual basis, the results of a review of the QA Program to determine the effectiveness and proper implementation of the QA Program

(4) Authority to stop work where conditions exist that prohibit effective quality programs, or if faulty materials, incorrect workmanship or procedures are detected

(5) Ensuring approval and control of quality assurance programs for outside organizations participating in the QA Program

(6) Providing and maintaining a qualified and suitably trained staff to carry out required staff functions

(7) Formulating programs for maintaining the professional competence of personnel within the Quality Assurance section and providing assistance in Quality Assurance training and indoctrination programs for

management, engineering and plant personnel whose activities affect quality

(8) Providing technical direction and guidance to the Quality Assurance staff

(9) Inspecting, auditing or reviewing practices, records, files, instructions, directions or documents concerned with all areas affecting quality

(10) Scheduling and coordinating audits or surveillance efforts in the areas assigned, documenting findings and reporting results to the Director, Quality and management of the audited area

1.3.3.3 Supervisors, Quality Control and NDE

The Supervisors, Quality Control and NDE report to the Director, Quality and are responsible for verifying the implementation of the Quality Control program at ANO. The duties and responsibilities of the Supervisors include the following:

(1) Interface with plant staff in developing quality control requirements and inspection points for operation, maintenance and modification activities related to safety-related (Q-listed) and fire protection-related (F-listed) systems, structures and components

(2) Interface with the Supervisor(s), Quality Assurance or their representatives for technical assistance in resolving significant conditions adverse to quality

(3) Authority to stop unsatisfactory work and authority to place an item in a nonconforming status when such an item is determined to be in violation of purchase documents, applicable codes and standards or SAR requirements

(4) Assuring surveillances, inspections, examinations, and reviews of plant activities and documents are conducted in accordance with approved procedures

(5) Providing technical direction and guidance to their staffs

(6) Providing and maintaining a qualified and suitably trained staff to carry out required staff functions and formulate programs for maintaining the professional competence of personnel within the Quality Control and NDE sections

1.3.4 Director, Support

The Director, Support reports to the Vice President, Operations ANO and is responsible for managing the nuclear five-year business plan, including establishing the budget and managing the goals and objectives program for the Nuclear Organization. Management of payroll and accounting is also provided by the Director, Support. He also provides planning, direction, control and overall supervision to the Fitness for Duty Department and Plant Security Department. Additionally, the control and maintenance of ANO records are a responsibility of the Director, Support. The Director, Support is responsible for providing direction and general supervision to the following technical and administrative individuals in support of the Vice President, Operations ANO:

(1) Manager, Site Business Services

(2) Manager, Support

(3) Medical Review Officer/Physician

(4) Superintendent, Administrative Services

(5) Superintendent, Plant Security

(6) Coordinators, Special Projects

1.3.4.1 Superintendent, Plant Security

The Superintendent, Plant Security reports to the Director, Support and is responsible for plant security including coordination of efforts of the security force and managing the operation of the security system.

1.3.5 Manager, Materials, Purchasing and Contracts - ANO

The Manager, Materials, Purchasing and Contracts - ANO reports to the offsite Director, Materials, Purchasing and Contracts and has direct responsibility for procurement, receipt, storage and issue of materials, parts and components to be used in Plant maintenance and modification activities. The Manager, Materials, Purchasing and Contracts establishes work priorities for Procurement Engineering. The Manager, Materials, Purchasing and Contracts provides technical direction and administrative guidance to the following:

(1) Superintendent, Stores Operations

(2) Superintendent, Inventory Control

(3) Supervisor, Procurement

(4) Supervisor, Materials Technical

1.3.6 Manager, Modifications

The Manager, Modifications reports to the Vice President, Operations ANO and provides direction, control and overall supervision to the Modifications Department in directing and overseeing the implementation of plant modifications and the performance of related support activities at ANO. Responsibilities include: directing the activities of the ANO Maintenance and Modifications Contractor and other contractors performing modification work at ANO; monitoring the effectiveness of the ANO Plant Modifications Program, and coordinating the resolution of related problems and the implementation of needed program improvements; and providing engineering services to support the review, preplanning, installation, testing, inspection, and closeout of Modification Packages. The Manager, Modifications is also responsible for the overall direction and conduct of the Post-Modification test program. The Manager, Modifications provides technical direction and administrative guidance to the:

(1) Supervisors, Modifications

(2) Supervisor, Project Services/Estimating

(3) Supervisor, Modifications Central Support

1.3.7 Director, Training and Emergency Planning

The Director, Training and Emergency Planning reports to the Vice President, Operations ANO and is responsible for the training and retraining of plant personnel and general office personnel as established by approved procedures. The Director, Training and Emergency Planning is also responsible for the implementation and maintenance of the ANO Emergency Plan. The Director, Training and Emergency Planning directs the activities of the ANO training staff and provides technical direction and administrative guidance to the:

(1) Supervisor, Operations Training

(2) Supervisor, Simulator Training

(3) Supervisor, Simulator Support

(4) Supervisor, Emergency Planning

(5) Supervisor, Maintenance Training

(6) Supervisor, Technical Training

(7) Coordinator, INPO Accreditation

(8) Technical Assistant to Director, Training & Emergency Planning

1.3.8 Director, Design Engineering

The Director, Design Engineering reports offsite to the Vice President, Engineering. The responsibilities of this position include the development and maintenance of engineering programs, policies and procedures; providing engineering services in support of design, evaluation, analysis, installation, testing, inspection, and operation of Arkansas Nuclear One; effective design modifications to correct deficiencies in plant systems and equipment, improve plant availability, efficiency, safety or productivity and assure thorough and complete design documentation to support effective configuration management for Arkansas Nuclear One.

The Director, Design Engineering provides technical direction and administrative guidance to others who direct activities in the areas of plant modifications, operability assessments, maintenance of the design bases of Arkansas Nuclear One, nuclear safety analyses, environmental qualifications, technical assistance in the resolution of Operations and Maintenance concerns, engineering standards, technical manuals, fire protection, engineering databases, onsite engineering programs, inservice inspection, inservice testing, and on-site welding.

1.3.9 Independent Review Organizations

In addition to the responsibilities of key individuals within the Nuclear Organization who are involved with the overall quality program, the following committees have been established as management tools to independently review activities occurring during the operational phase of ANO.

1.3.9.1 Safety Review Committee (SRC)

1.3.9.1.1 The Safety Review Committee shall function to provide independent review and audit of designated activities in the areas of:

a. Nuclear power plant operations

b. Nuclear engineering

c. Chemistry and radiochemistry

d. Metallurgy

e. Instrumentation and control

f. Radiological safety

g. Mechanical and electrical engineering

h. Quality assurance practices

1.3.9.1.2 Composition

1.3.9.1.2.1 The SRC shall be composed of a chairman and eight to twelve members.

1.3.9.1.2.2 The Vice President, Operations ANO shall designate, in writing, the Chairman and all SRC members.

1.3.9.1.2.3 The Chairman shall designate, in writing, the alternate Chairman in the absence of the SRC Chairman.

1.3.9.1.2.4 All alternate members shall be appointed in writing by the SRC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SRC activities at any one time.

1.3.9.1.2.5 Consultants shall be utilized as determined by the SRC Chairman to provide expert advice to the SRC.

1.3.9.1.3 Review Function

1.3.9.1.3.1 The SRC shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per six months thereafter. The minimum quorum of the SRC necessary for the performance of the SRC review and audit functions of these technical specifications shall consist of the Chairman or his designated alternate and at least a majority of the SRC members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the unit.

1.3.9.1.3.2 The SRC shall report to and advise the Vice President, Operations ANO on those areas of responsibility specified in paragraph 1.3.9.1.3.3 below.

1.3.9.1.3.3 The SRC shall review:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of 10 CFR 50.59 to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.

d. Proposed changes to Technical Specifications or Operating Licenses.

e. Violations of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All REPORTABLE EVENTS pursuant to Technical Specification 6.6.2 and 6.6.1 (for Unit 1 and Unit 2 respectively).

h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.

i. Reports and meetings minutes of the Plant Safety Committee.

j. Proposed changes to the ODCM and PCP.

k. Audits of facility activities as specified in this manual.

1.3.9.1.4 Records of SRC activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each SRC meeting shall be prepared, approved and forwarded to the Vice President, Operations ANO within 14 days following each meeting.

b. Reports of reviews encompassed by paragraph 1.3.9.1.3.3 above shall be prepared, approved and forwarded to the Vice President, Operations ANO within 14 days following completion of the review.

c. Audit reports encompassed by this manual shall be forwarded to the Vice President, Operations ANO and to the management positions responsible for the areas audited within 30 days after completion of the audit.

1.3.9.2 Plant Safety Committee (PSC)

1.3.9.2.1 The Plant Safety Committee for each operating unit shall function to advise the General Manager, Plant Operations and applicable Plant Manager on all matters related to nuclear safety.

1.3.9.2.2 Composition

1.3.9.2.2.1 The Plant Safety Committee for each operating unit shall be composed of eight members of ANO onsite management organization whose selection is described in internal procedures.

1.3.9.2.2.2 The General Manager, Plant Operations shall designate in writing a PSC Chairman and at least one Alternate Chairman.

1.3.9.2.2.3 All alternate members shall be appointed in writing by the PSC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in PSC activities at any one time.

1.3.9.2.2.4 For Unit 2 PSC, if Core Protection Calculator (CPC) Software is being reviewed, a nuclear software expert shall be present as a voting member. If one of the members of the Plant Safety Committee meets the qualification requirements for this position, the requirement to have this member is satisfied. This membership may be filled by two appropriately qualified individuals who shall ballot with a single combined vote. Generic qualifications for this membership shall be as follows:

One Individual

The Nuclear Software Expert shall have as a minimum a Bachelor's degree in Science or Engineering, (Nuclear preferred) in accordance with ANSI N18.1. In addition, he shall have a minimum of four years of technical experience, of which a minimum of two years shall be in Nuclear Engineering and a minimum of two years shall be in Software Engineering. (Software Engineering is that branch of science and technology which deals with the design and use of software. Software Engineering is a discipline directed to the production and modification of computer programs that are correct, efficient, flexible, maintainable, and understandable, in reasonable time spans, and at reasonable costs.) The two years of technical experience in Software Engineering may be general software experience not necessarily related to the software of the Core Protection Calculator System. One of these two years of experience shall be with certified computer programs.

Two Individuals

One of the individuals shall meet the requirements of the Nuclear Engineering portion of the above. The second individual shall have a Bachelor of Science degree (digital computer specialty) and meet the Software Engineering requirements of the above. The membership (the Nuclear Software Expert or the Digital Computer Specialist) shall be knowledgeable

of the Core Protection Calculator System with regard to:

a. The software modules, their interactions with each other and with the data base.

b. The relationship between operator's module inputs and the trip variables.

c. The relationship between sensor input signals and the trip variable.

d. The design basis of the Core Protection Calculator System.

e. The approved software change procedure and documentation requirements of a software change.

f. The security of the computer memory and access procedures to the memory.

1.3.9.2.3 Review Function

1.3.9.2.3.1 The PSC for each operating unit shall meet at least once per calendar month and as convened by the PSC Chairman or his designated alternate. The minimum quorum of the PSC necessary for the performance of the PSC responsibilities designated in this manual shall consist of the Chairman or his designated alternate and four members including alternates. The PSC Chairman shall ensure that adequate expertise is present during meetings to evaluate material before the PSC.

1.3.9.2.3.2 The Plant Safety Committee shall be responsible for:

a. Review of 1) all station administrative procedures recommended in Appendix A of Reg. Guide 1.33 (November, 1972 for Unit 1 and Revision 2, February, 1978 for Unit 2) and changes in intent thereto, 2) changes to the Emergency Operating Procedures for each operating unit required to implement the requirements of NUREG-0737 and Supplement 1 to NUREG-0737 as stated in

Section 7.1 of Generic Letter 82-33, 3) changes to Core Protection Calculator (CPC) Software (for Unit 2), and 4) any other proposed procedures or changes thereto as determined by the General Manager, Plant Operations or applicable Plant Manager.

b. Review of all proposed tests and experiments that affect nuclear safety.

c. Review of all proposed changes to Appendix "A" Technical Specifications for each operating unit.

d. Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety.

e. Investigation of all violations of the Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendation to prevent recurrence to the applicable Plant Manager, General Manager, Plant Operations and the Chairman of the Safety Review Committee.

f. Review of all REPORTABLE EVENTS.

g. Review of facility operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations or analyses, and reports thereon as requested by a Plant Manager, General Manager, Plant Operations or the Safety Review Committee.

i. Review of the Plant Security Plan and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

j. Review of the Emergency Plan and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

k. Review of changes to the Offsite Dose Calculation Manual and Process Control Program.

l. Review of changes to the Fire Protection Program and submittal of recommended changes to the General Manager, Plant Operations and Safety Review Committee.

m. Review of proposed procedures and changes to procedures which involve an unreviewed safety question as defined in 10CFR50.59.

n. Review and documentation of judgment concerning extended operation (longer than 48 hours) with a PPS trip channel in bypass. Review shall determine whether to leave the trip channel in bypass, place the channel in trip, and/or repair the defective

The Plant Safety Committee shall:

a. Recommend in writing their approval or disapproval of items considered under paragraph 1.3.9.2.3.2(a) through (d) above.

b. Render determinations in writing with regard to whether or not each item considered under paragraph 1.3.9.2.3.2(a) through (e) above constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Vice President, Operations ANO and the Safety Review Committee of disagreement between the PSC and a Plant Manager or the General Manager, Plant Operations; however, the General Manager, Plant Operations shall have responsibility for resolution of such disagreements pursuant to Technical Specification 6.1.1 for each operating unit.

1.3.9.2.4 The Plant Safety Committee shall maintain written minutes of each PSC meeting that, at a minimum, document the results of all PSC activities performed under paragraphs 1.3.9.2.3.2 and 1.3.9.2.3.3 above. Copies shall be provided to the applicable

Plant Manager, General Manager, Plant Operations and Chairman of the Safety Review Committee.

1.4 ENTERGY OPERATIONS OFFSITE ORGANIZATION

1.4.1 President & Chief Executive Officer

The President & Chief Executive Officer has the ultimate responsibility for the safe and reliable operation of the Entergy Operations' nuclear sites. He provides guidance with regard to quality assurance and internal audit policy, coordinates foreign visits, interfaces with World Association of Nuclear Operations, interfaces with the state public service commissions, and oversees strategic planning.

He delegates authority and responsibility for the operation and support of ANO through the Executive Vice President & Chief Operating Officer; the Director, Business Services; the Director, Nuclear Fuels; and the Director, Total Quality.

1.4.2 Executive Vice President & Chief Operating Officer

The Executive Vice President & Chief Operating Officer has the responsibility to oversee all operations and engineering functions of Entergy Operations. He delegates authority and responsibility for the operation and support of ANO through the Vice President, Operations ANO; the Vice President, Engineering; and the Vice President, Operations Support. It is the responsibility of the Executive Vice President & Chief Operating Officer to assure that all safety-related activities under his direction are performed following the guidelines of the Quality Assurance Program Manual.

1.4.2.1 Vice President, Operations Support

The Vice President, Operations Support reports directly to the executive Vice President and Chief Operating Officer and is responsible for administering corporate support functions in the areas of radiological protection, radioactive waste management, chemistry, environmental services, operations, maintenance, outage management, security, emergency planning, technology transfer, licensing; plant assessments, information technology, material requirements and materials, purchasing and contracts. It is the responsibility of the Vice President, Operations, Support to assure that these functions performed for ANO are performed in accordance with the requirements of the Quality Assurance Program Manual.

1.4.2.1.1 Director, Materials, Purchasing & Contracts

The Director, Materials, Purchasing and Contracts reports to the Vice President, Operations Support and is responsible for the oversight and development of purchasing policies and procedures consistent across Entergy Operations nuclear sites and Headquarters and providing the direction and administration necessary relative to quality responsibilities as they relate to the Quality Assurance Program Manual.

1.4.2.1.1.1 Manager, Material Requirements

The Manager, Material Requirements reports to the Director, Materials, Purchasing and Contracts and is responsible for:

1. Evaluating quality assurance programs and activities of ANO suppliers and contractors of quality-related items, spare parts, and services through reviews, surveillances, and audits;

2. Conducting pre-award evaluations for quality requirements of vendors, suppliers, and contractors, where applicable.

3. Maintaining a Qualified Suppliers List (QSL) for use in procuring safety-related items, spare parts, and services; and

4. Performing design review and fuel fabrication audits as necessary to ensure that nuclear fuel procured for use by Entergy Operations is designed and fabricated in accordance with applicable codes, standards, and regulations.

The authority for the accomplishment of the above activities is delegated to the incumbent's staff.

1.4.2.2 Director, Nuclear Fuels

The Director, Nuclear Fuels reports to the Executive Vice President and Chief Operating Officer and is responsible for the procurement of nuclear fuel for ANO, the provision of nuclear fuel cash flow and cost projections for use in company business plan and fuel financing activities, the maintenance of the Official Entergy Operations Nuclear Operating Schedule, and the oversight of nuclear fuel accounting activities.

1.4.2.3 Vice President, Engineering

The Vice President, Engineering reports to the Executive Vice President and Chief Operating Officer and is responsible for providing nuclear engineering services for ANO, as requested. The incumbent is responsible for Design Engineering, fuel design and core design. In addition, the incumbent has overall administrative, programmatic and operational control of the Entergy Operations, Inc. Welding Program.

1.4.3 Vice President, Human Resources & Administration

The Vice President Human Resources & Administration is responsible for the administration of functions associated with Corporate Services and Human Resources. He delegates authority and responsibility for the accomplishment of the above activities through the Director, Human Resources. It is the responsibility of the Vice President, Human Resources & Administration to assure that the safety-related activities under his direction are performed following the guidelines of the Quality Assurance Program Manual.

1.4.3.1 Director, Human Resources

The Director, Human Resources reports to the Vice President, Human Resources and Administration and is responsible for functions associated with programs dealing with employees compensation, benefits, employee and labor relations, affirmative action, recruitment, industrial safety, succession planning and human resource development. He delegates authority and responsibility for employee relations activities at ANO through the Manager, Human Resources-ANO.

1.5 ORGANIZATIONAL INTERFACES AND RESPONSIBILITIES

Entergy Arkansas, Inc. and Entergy Operations, Inc. are joint licensees under the facility operating license condition, each responsible for specific areas and jointly responsible for regulatory compliance and response. Entergy Arkansas, Inc. is licensed to possess the facility and Entergy Operations, Inc. is licensed to possess, use and operate the facility.

Each supplier of equipment, material or services and each maintenance or modification contractor is responsible for administering the applicable quality assurance/quality control functions as required by ANO. The Quality Organization is responsible for assuring by surveillance, inspection, audit or review of objective evidence that onsite functions are accomplished for systems, structures and services that affect the safety and integrity of the plant.