Entergy

Entergy Operations, Inc.
1340 Echelon Parkway
Jackson, Mississippi 39213-8298
Tel 601-368-5758

John McCann
Director, Nuclear Safety & Licensing

CNRO-2009-00006
ENOC-09-00010

April 13, 2009

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Annual report for Quality Assurance Program Manual changes under 10CFR50.54(a)(3) and 10CFR72.140(e) Notification of Application of Approved Appendix B to 10CFR72 subpart G.

Arkansas Nuclear One
Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6
Docket No. 72-13

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29
Docket No. 72-50

River Bend Station
Docket No. 50-458
License No. NPF-47
Docket No. 72-49

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

Vermont Yankee Nuclear Power Station
Docket No. 50-271
License No. DPR-28
Docket No. 72-59

Palisades Nuclear Power Plant
Docket No. 50-255
License No. DPR- 20
Docket No. 72-07

Indian Point 1 Nuclear Power Plant
Docket No. 50-003
License No. DPR-05
Docket No. 72-51

Indian Point 2 Nuclear Power Plant
Docket No. 50-247
License No. DPR-26
Docket No. 72-51

Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Docket No. 72-51

Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-59
Docket No. 72-12

Big Rock Point Nuclear Plant-ISFSI
Docket No. 50-155
License No. DPR-6
Docket No. 72-43

Q 004
NMSS0
NRR

CNRO-2009-00006
ENOC-09-00010

Dear Sir or Madam:

Entergy Operations, Inc. is submitting the attached Quality Assurance Program Manual (QAPM), Revision 18 in accordance with 10 CFR 50.54(a)(3). Revision 18 has an effective date of April 15, 2008. The last annual submittal, dated April 23, 2008, encompassed QAPM Revision 18. Since that date there have been no updates incorporated into the QAPM. The Entergy QAPM revision 18 remains effective and is included under Attachment A.

The QAPM continues to satisfy the requirements of 10 CFR 50 Appendix B and the Regulatory Guides and ANSI Standards referenced in the QAPM Table of Contents and QAPM Attachment, Table 1.

I hereby certify to the best of my knowledge, information and belief that the information provided herein accurately reflects the QAPM since the last annual submittal of April 2008.

Should you have any questions, please contact Mr. Steve Blake at (601) 368-5620.

Yours truly,

JM/SB/AJT/AYE

Attachment: QAPM Revision 18

cc: (See Next Page)

CNRO-2009-00006
ENOC-09-00010

cc: M. Kansler (ECH)
J. T. Herron (ECH)
M. Balduzzi (WPO)
J. Forbes (ECH)
T. Mitchell (ECH)
R. Brian (ECH)
O. Limpias (ECH)
K. Walsh (ANO)
M. Perito (RBS)
J. Douet (GGNS)
J. Kowalewski (WF3)
J. Pollock (IPEC)
P. Dietrich (JAF)
K. Bronson (Pilgrim)
C. Schwarz (PAL)
M. Colomb (VY)
S. Minahan (CNS)
E. Weinkam (WPO)
B.S. Ford (ECH)
C.D. Faison (WPO)
All above w/o attachments

NRC Region I Administrator
NRC Region III Administrator
NRC Region IV Administrator
NRC PM (ANO)
NRC PM (GGNS)
NRC PM (RBS)
NRC PM (WF3)
NRC PM (IPEC)
NRC PM (JAF)
NRC PM (Pilgrim)
NRC PM (PAL)
NRC PM (BRP)
NRC PM (VY)
NRC PM (CNS)
NRC Senior Resident Inspector (ANO)
NRC Senior Resident Inspector (GGNS)
NRC Senior Resident Inspector (RBS)
NRC Senior Resident Inspector (WF3)
NRC Senior Resident Inspector (IPEC)
NRC Senior Resident Inspector (JAF)
NRC Senior Resident Inspector (PILGRIM)
NRC Senior Resident Inspector (VY)
NRC Senior Resident Inspector (PAL)
NRC Senior Resident Inspector (CNS)

Attachment A

CNRO-2009-00006
ENOC-09-00010

QAPM Revision 18

Entergy

Quality Assurance Program Manual

Arkansas Nuclear One
Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 & NPF-6
Docket No. 72-13

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29
Docket No. 72-50

River Bend Station
Docket No. 50-458
License No. NPF-47
Docket No. 72-49

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

Vermont Yankee Nuclear Power Station
Docket No. 50-271
License No. DPR-28
Docket No. 72-59

Palisades Nuclear Power Plant
Docket No. 50-255
License No. DPR- 20
Docket No. 72-07

Indian Point 1 Nuclear Power Plant
Docket No. 50-003
License No. DPR-05
Docket No. 72-51

Indian Point 2 Nuclear Power Plant
Docket No. 50-247
License No. DPR-26
Docket No. 72-51

Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Docket No. 72-51

Pilgrim Nuclear Power Station
Docket No. 50-293
License No. DPR-35

James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-59
Docket No. 72-12

Big Rock Point Nuclear Plant-ISFSI
Docket No. 50-155
License No. DPR-6
Docket No. 72-43

Effective: **April 15**, 2008

Revision **18**

TABLE OF CONTENTS

SECTION			PAGE
A.	MANAGEMENT		
	1.	Methodology	1
	2.	Organization	1
	3.	Responsibility	4
	4.	Authority	5
	5.	Personnel Training and Qualification	5
	6.	Corrective Action	5
	7.	Regulatory Commitments	6
B.	PERFORMANCE/VERIFICATION		
	1.	Methodology	7
	2.	Design Control	7
	3.	Design Verification	8
	4.	Procurement Control	9
	5.	Procurement Verification	10
	6.	Identification and Control of Items	11
	7.	Handling, Storage, and Shipping	11
	8.	Test Control	12
	9.	Measuring and Test Equipment Control	12
	10.	Inspection, Test, and Operating Status	13
	11.	Special Process Control	14
	12.	Inspection	14

TABLE OF CONTENTS

SECTION		PAGE
B.	**PERFORMANCE/VERIFICATION (continued)**	
13.	**Corrective Action**	15
14.	**Document Control**	15
15.	**Records**	16
C.	**AUDIT**	
1.	**Methodology**	17
2.	**Performance**	17
D.	**INDEPENDENT SAFETY REVIEW**	
1.	**Description**	20
Table 1- Regulatory Commitments		
	Regulatory Guide 1.8 Revision 1, dated September 1975 "Personnel Qualification and Training"	21
	Regulatory Guide 1.30, dated August 1972 "Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment"	22
	Regulatory Guide 1.33 Revision 2, dated February 1978 "Quality Assurance Program Requirements"	23
	Regulatory Guide 1.37, dated March 1973 "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants"	27
	Regulatory Guide 1.38 Revision 2, dated May 1977 "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants"	28
	Regulatory Guide 1.39 Revision 2, dated September 1977 "Housekeeping Requirements for Water-Cooled Nuclear Power Plants"	33

TABLE OF CONTENTS

SECTION	PAGE
Table 1- Regulatory Commitments (continued)	
Regulatory Guide 1.58 Revision 1, dated September 1980 "Qualifications of Nuclear Power Plant Inspection, Examination, and Testing Personnel"	34
Regulatory Guide 1.64 Revision 2, dated June 1976 "Quality Assurance Requirements for the Design of Nuclear Power Plants"	35
Regulatory Guide 1.74 dated February 1974 "Quality Assurance Terms and Definitions"	36
Regulatory Guide 1.88 Revision 2, dated October 1976 "Collection, Storage and Maintenance of Nuclear Power Plant Quality Assurance Records"	37
Regulatory Guide 1.94 Revision 1, dated April 1976 "Quality Assurance Requirements for Installation, Inspection and Testing of Structural Steel during the Construction Phase of Nuclear Power Plants"	39
Regulatory Guide 1.116 Revision 0-R, dated June 1976 "Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems"	42
Regulatory Guide 1.123 Revision 1, dated July 1977 "Quality Assurance Requirements for control of Procurement of Items and Services for Nuclear Power Plants"	43
Regulatory Guide 1.144 Revision 1, dated September 1980 "Auditing of Quality Assurance Programs for Nuclear Power Plants"	45
Regulatory Guide 1.146 Revision 0, dated August 1980 "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants"	47

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's (Entergy Operations, Inc.'s (EOI) and Entergy Nuclear Operations, Inc. (ENOI)) 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 that 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 (e.g., 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. The chief executive officer is responsible for providing top-level direction for the safe and reliable operation of Entergy's nuclear sites. The chief executive officer provides guidance with regards to company quality assurance policy.

A.2 (continued)

b. The president responsible for planning, development and oversight provides guidance and interpretation for implementing the company quality assurance policy. This president reports to the chief executive officer.

c. The following executive reports to the president responsible for planning, development and oversight:

1. The senior vice president responsible for planning, development and oversight is responsible for establishing the policies, goals and objectives of the quality assurance policy.

2. The executive responsible for oversight reporting to the senior vice president responsible for planning, development and oversight is responsible for governance and implementation of the quality assurance program in accordance with regulatory requirements. Independent oversight groups including the off-site safety review committee report to this executive.

d. The following executives report to the chief executive officer and provide guidance in regards to implementing company quality assurance policy:

1. The senior vice president responsible for nuclear operations is responsible for the implementation of all activities associated with the safe and reliable operation of Entergy's nuclear.

2. The senior vice president responsible for engineering is responsible for providing engineering services, project management services, materials, purchasing, and contracts, information technology, nuclear safety, and licensing activities.

e. The following executives report to the senior vice president responsible for nuclear operations:

1. The executive responsible for overall regional and plant nuclear safety are responsible for implementing quality assurance policies, goals, and objectives.

2. The executive responsible for nuclear support is responsible for implementing quality assurance policies, goals, and objectives of Entergy's corporate support activities.

A.2 (continued)

f The following executive reports to the senior vice president responsible for engineering and technical services:

1. The executive responsible for engineering is responsible for providing engineering services including implementing quality assurance policies, goals, and objectives.

2. The executive responsible for project management is responsible for providing project management services, including implementing quality assurance policies, goals, and objectives.

g. 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.

2. The manager responsible for overall plant operations assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements and the operating license. The onsite safety review committee reports to the manager responsible for plant operations.

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.

A.2 (continued)

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.

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.

h. 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 that 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. deleted

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.

A.3 (continued)

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.

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 and a corrective action plan that precludes repetition.

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.

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

A.7 (continued)

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) or 10 CFR 50.54(a)(4).

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. 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.

B.2 (continued)

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. 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.

B.3 (continued)

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.

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.

B.4 (continued)

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.

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.

B.5 (continued)

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.

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).

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, gauges, and reference and transfer standards) are defined in procedures.

B.9 (continued)

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.

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.

B.10 (continued)

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 that 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.

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.

B.12 (continued)

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).

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.14 (continued)

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.

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.

B.15 (continued)

c. The program includes provisions for the use of various record storage media to maintain QA records. Procedures are developed to implement the regulatory guidance associated with the media used. The NRC Generic Letter 88-18 "Plant Record Storage on Optical Disk" is implemented for optical disk media. The Regulatory Issue Summary 2000-18 "Guidance on Managing QA Records in Electronic Media" is implemented for electronic media.

d. 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.

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 correspondences 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. Audits of stand alone Independent Spent Fuel Storage Installations (ISFSIs) (e.g. those not sited with an operating nuclear power plant) may be conducted in accordance with Section C.2.a.4.

C.2 (continued)

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.

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 are audited at least once every 24 months.

C.2 (continued)

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 are 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 every 24 months.

h. The fire protection program and implementing procedures audit shall be performed at least once every 24 months.

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

4. The audit schedule for stand alone ISFSIs may combine audits to cover the areas defined in section C.2.a.2 that are invoked by the ISFSI technical specifications.

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.

C.2 (continued)

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, other than Licensed Operators covered under 10CFR55, shall meet ANSI/ANS 3.1 1978 except for positions where an exception to either ANSI/ANS 3.1-1978 or N18.1 -1971 is stated in the applicable unit's Technical Specifications. If an exception exists for a given position, the applicable unit's Technical Specification qualification requirements shall apply. 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 are 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.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
6.	ANSI N18.7 Section 4.3.4.(1) & (2)	10 CFR 50.59 was revised through Federal Register Notice 19991001 R1N3150-AF94 eliminating the terms "safety evaluation" and "unreviewed safety question." The term "safety evaluation" has been replaced with 10 CFR 50.59 "evaluation." The term "unreviewed safety question," as defined in the previous version of 10 CFR 50.59 (a)(2), was replaced by criteria provided in 50.59(c)(2) to determine if a license amendment pursuant to 50.90 is required prior to implementing the change, test, or experiment.
7.	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.
8.	ANSI N18.7 Section 4.3.4(3)	Revision to proposed Technical Specification changes only requires review in accordance with this section when the revision involves a significant change to the technical basis for the proposed change. **The independent review body discussed in this section is the on-site safety review committee. Voting members having a potential conflict of interest refrain from voting on documents under review.**
9.	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.
10.	ANSI N18.7 Section 4.3.4(5)	An example of the matters reviewed by the on-site safety review committee in accordance with this section is a change to the Emergency Plan (except editorial changes).
11.	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.
12.	ANSI N18.7 Section 4.5	The independent review body discussed in this section is the off-site safety review committee.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
13.	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.
14.	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.
15.	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.
16.	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.
17.	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.
18.	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.

Table 1
Regulatory Commitments

C. Regulatory Guide 1.33 (continued)

		Clarification/Exception
19.	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."
20.	ANSI N18.7 Section 5.2.9	The requirements of the Physical Security Plan shall be implemented in place of these general requirements.
21.	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.
22.	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.
23.	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.
24.	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.
25.	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.
26.	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 that 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 A.3.7.1(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 **or engineering** 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 NFPA No. 232-1975, "Standards for the Protection of Records", as allowed by the Regulatory Guide 1.88 – 1976 or 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 (continued)

		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 NFPA No. 232 – 1975, "Standards for the Protection of Records", as allowed by the Regulatory Guide 1.88 – 1976 or 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: <u>PLACING TEMPERATURES OF CONCRETE</u> 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.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 Revision 1, dated July 1977 (continued)

		Clarification/Exception
5a.	**ANSI N45.2.13 Section 3.2**	**When purchasing commercial-grade (as defined in 10CFR21) calibration services from NVLAP or A2LA accredited calibration laboratories, procurement documents are not required to impose a quality assurance program consistent with ANSI N45.2-1971. In such cases, accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with ANSI N45.2-1971, provided all the following are met:** • **The accreditation is to ANSI/ISO/IEC 17025.** • **The accrediting body is either NVLAP A2LA.** • **The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.** • **The purchase documents require calibration/report to include identification of the laboratory equipment/standards used.** • **The purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.**
6.	ANSI N45.2.13 Section 3.4	The requirements of the QAPM will be implemented instead of this section.
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.

Table 1
Regulatory Commitments

M. Regulatory Guide 1.123 Revision 1, dated July 1977 (continued)

		Clarification/Exception
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.

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 Revision 1, dated September 1980 (continued)

		Clarification/Exception
4a.	**RG 1.144 Section C.3.b.(2)**	**For suppliers of commercial-grade (as defined in 10CFR21) calibration services with accreditation by NVLAP or A2LA, a documented review of the supplier's accreditation by the purchaser may be used in lieu of performing an audit, accepting an audit by another licensee, performing a commercial-grade survey, inspecting or testing following delivery, or performing in-process surveillances during performance of the service. This review shall include, at a minimum, verification of all the following:** • **The accreditation is to ANSI/ISO/IEC 17025.** • **The accrediting body is either NVLAP A2LA.** • **The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.**
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.
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."

Table 1
Regulatory Commitments

N. Regulatory Guide 1.144 (continued)

		Clarification/Exception
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.