

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

Vermont Operation Quality Assurance Manual

Y00AP-I-AVOQAM

PREPARED BY:

Walter K. Peterson

Walter K. Peterson  
Manager, Quality Assessment Services Department

REVIEWED BY:

C. Russell Clark

C. Russell Clark  
Executive-Director, Quality Assurance

REVIEWED BY:

Robert J. Wanczyk

Robert J. Wanczyk  
Director of Safety and Regulatory Affairs  
Vermont Yankee

APPROVED BY:

Gregory A. Reed

Gregory A. Reed  
Director of Operations Senior Vice-President, Operations  
Vermont Yankee

Title: VOQAMY00AP-I-A

Page: 1

Rev.: 1 28

9810210139 981019  
PDR ADOCK 05000271  
P PDR

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00AP-I-A

TABLE OF CONTENTS/INDEX

<u>Section No.</u>	<u>Title</u>	<u>Revision</u>
-	AMENDMENT/REVISION	1 28
-	POLICY STATEMENT	1 28
I	ORGANIZATION	1 28
II	QUALITY ASSURANCE PROGRAM	1 28
III	DESIGN CONTROL	1 28
IV	PROCUREMENT DOCUMENT CONTROL	1 28
V	INSTRUCTIONS, PROCEDURES, AND DRAWINGS	1 28
VI	DOCUMENT CONTROL	1 28
VII	CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES	1 28
VIII	IDENTIFICATION AND CONTROL OF MATERIAL, PARTS, AND COMPONENTS	1 28
IX	CONTROL OF SPECIAL PROCESSES	1 28
X	INSPECTION	1 28
XI	TEST CONTROL	1 28
XII	CONTROL OF MEASURING AND TEST EQUIPMENT	1 28
XIII	HANDLING, STORAGE, AND SHIPPING	1 28
XIV	INSPECTION, TEST, AND OPERATING STATUS	1 28
XV	NONCONFORMING MATERIALS, PARTS, AND COMPONENTS	1 28
XVI	CORRECTIVE ACTION	1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00AP-I-A

TABLE OF CONTENTS/INDEX  
(Continued)

<u>Section No.</u>	<u>Title</u>	<u>Revision</u>
XVII	QUALITY ASSURANCE RECORDS	<u>1</u> 28
XVIII	AUDITS	<u>1</u> 28
APPENDIX A	QUALIFICATION REQUIREMENTS	<u>1</u> 28
APPENDIX B	EXCEPTIONS	<u>1</u> 28
APPENDIX C	VY CLASSIFICATION	<u>1</u> 28
APPENDIX D-----	YR CLASSIFICATION	28

Title: Table of Contents  
Page: III  
| Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00QAP-I-A

AMENDMENT/REVISION SHEET

<u>Revision No.</u>	<u>Date</u>	<u>Reason</u>
0 (Amendment-1)	12/10/79	To address questions submitted by letter from NRC (K. R. Goller) to L. H. Heider (11/1/76).
0 (Amendment-2)	1/13/77	To address questions submitted by letter from NRC (K. R. Goller) to L. H. Heider (12/28/76).
1	9/15/77	To address organizational, programmatic, and editorial changes.
2	11/01/77	To address organizational changes.
3	11/25/77	To address organizational changes at Vermont Yankee.
4	1/13/78	To address combined inspection numbers 50-29/77-20; 50-281/77-15; and 50-309/77-16 unresolved item 4.a.
5	1/30/78	To address change in exception for ANSI N45-2-3-1973.
6	10/19/78	To address exceptions to ANSI N45-2-2-1972.
6 (Amendment-1)	3/29/79	To resolve items submitted by letter from NRC (W. P. Haass) to L. H. Heider (3/6/79).
7	9/11/79	To address changes to Yankee Rowe (Appendix-D) and Vermont Yankee (Appendix-E) Safety Classifications.
8	4/04/80	To address organizational changes.
9	3/09/81	To address organizational changes.
10	4/03/81	To add "Packaging of Radioactive Materials" and "Fire Protection of Safety Related Areas" to "Other Items Requiring Quality Assurance".

Title: Amendment/Revision Sheet

Page: IV

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00AP-1-A

AMENDMENT/REVISION SHEET  
(Continued)

<u>Revision No.</u>	<u>Date</u>	<u>Reason</u>
11	3/01/82	To resolve items submitted by letter from NRC (W. P. Haass) to W. P. Johnson (6/10/81).
12	3/11/83	To address organizational changes.
13		To address organizational and programmatic changes.
14	10/12/83	To address organizational changes.
15	2/15/84	To address programmatic changes.
16	10/31/85	To address organizational and programmatic changes.
17	12/05/86	To address organizational and programmatic changes.
17A	8/14/87	To clarify surveillance activities and change VP-MOU responsibilities for the level of deficiencies requiring evaluation.
18	4/29/88	To address organizational and programmatic changes.
19	10/02/89	To address organizational and responsibility changes and deletion of Appendix C.
19A	6/01/90	To update organizational chart (for VY) to be consistent with Proposed Change No. 157 and to address organizational changes at Vermont Yankee.
20	12/21/90	To update organizational changes at Yankee and change QAD's responsibility from reviewing design documents to auditing those documents for inclusion of quality requirements.

Title: Amendment/Revision Sheet

Page: V

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00AP-I-A

AMENDMENT/REVISION SHEET  
(Continued)

<u>Revision No.</u>	<u>Date</u>	<u>Reason</u>
21	11/15/91	To update organizational changes at Yankee and Vermont Yankee and change QAD responsibility from revising recommendations to prevent recurrences of significant condition adverse to quality to providing the option to review and/or audit recommendations.
22	4/15/92	To delete Appendix D listing and reference Yankee Safety Classification of Systems Manual.
23	9/30/92	To address organizational and responsibility changes.
24	12/15/93	To address organizational changes, and DQA/NSARC reporting clarification, for Vermont Yankee.
25	12/15/94	To address organizational changes made at the Yankee Nuclear Power Station addressing the decommissioning organization. Clarifications in the revised corrective action process at Vermont Yankee, and to address an exception to Regulatory Guide 1.64, and to clarify responsibilities between the Yankee and Vermont Yankee Plants.
26	12/21/95	To address organizational changes at the Yankee Nuclear Power Station and the Vermont Yankee Nuclear Power Station. To address exceptions to ANSI-18.7 and Regulatory Guide 1.33.
27	12/20/96	To address organizational changes.
28	5/30/97	To update organizational changes. Changed exception to Regulatory Guide 1.26 by adding ANS-52.1 and Section 2d of Regulatory Guide 1.26 as alternatives.

Title: Amendment/Revision Sheet  
Page: VI  
Rev.: 1 28

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VOQAMY00AP-I-A

AMENDMENT/REVISION SHEET  
(Continued)

<u>Revision No.</u>	<u>Date</u>	<u>Reason</u>
<u>0</u>	<u>5/1/98</u>	<u>To adopt Rev. 27 of the YOQAP as Rev. 0 for the VOQAM. (Reference VY letter to NRC, dated 4/12/98.)</u>
<u>1</u>	<u>10/16/98</u>	<u>To update organizational changes, removed all references to YAEC and YNSD. VY assumed all YNSD responsibilities. Changed Sr. Vice President, Operations, to Director of Operations.</u>

Title: Amendment/Revision Sheet

Page: VII

| Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

POLICY STATEMENT

OPERATIONAL QUALITY ASSURANCE PROGRAM

It is the policy of those organizations operating under this Quality Assurance Program to strive for excellence in all aspects of nuclear power plant operation. This goal can only be attained if each individual recognizes that Quality is everyone's responsibility. Each worker, supervisor, and manager has a role to play in achieving the goal of "doing it right the first time." Only if we recognize that Quality is of paramount importance can we continue to provide for the safe and reliable generation of power.

The function of the quality verification program is to assess the adequacy, content, and appropriateness of the work being performed and to facilitate continuous enhancements. This function supports the line organizations and provides management with needed feedback. However, supervision and management should not rely solely upon the efforts of the Quality Assurance Groups for quality verification; they must also take an active role in self-assessment of those activities under their control to identify quality problems. As previously noted, the ultimate responsibility for quality lies with the line organization.

Under the program, ~~the Yankee Atomic Electric Company President is the final management authority responsible for assuring that this policy statement and the Quality Assurance Program are implemented within the Yankee Atomic Electric Company.~~ The Director of Operations Vermont Yankee Senior Vice President, Operations, is the final management authority responsible for assuring that the Quality Assurance Program is implemented within the Vermont Yankee Nuclear Power Corporation.

The ~~President or a~~ Vice President/Director/Department Head is responsible for implementing the program for those departments under his (or her) direction. The Executive Director of Quality Assurance reporting to the Director of Safety and Regulatory Affairs, is responsible for preparation establishment, control, and distribution of the Quality Assurance Program and revisions thereto, and shall establish policies under which the Quality Assurance Department operates. The Quality Assurance staff shall have the

Title: Policy Statement

Page: 1 of 2

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

authority and organizational freedom to meet the requirements of 10CFR50, Appendix B.

The Plant Superintendent/Manager shall be responsible for the day-to-day implementation of the program's procedural requirements at the plant.

The Nuclear Safety Audit and Review Committee shall review the adequacy and effectiveness of this program. Any discrepancies and/or recommendations for corrections or enhancements shall be reported to the Director of Operations Cognizant-Corporate-Officer.

The safe and reliable generation of power can only be achieved with the cooperation and support of all personnel. We expect that every individual will perform his or her task with the skill, professionalism, and dedication necessary to achieve this goal.

Title: Policy Statement

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

I. ORGANIZATION

A. SCOPE

This section of the Operational Quality Assurance Program describes the duties and responsibilities of the personnel involved in establishing and executing the Operational Quality Assurance Program.

B. RESPONSIBILITY

The responsibility for design, redesign, evaluation, and operation of the Plant rests with the ~~Yankee-Atomic-Electric Company Nuclear Services Division and Vermont Yankee Nuclear Power Corporation.~~ The ~~responsibility for developing and implementing the Operational Quality Assurance Program within the Yankee Nuclear Services Division and the Yankee Site is vested in the President of the Yankee Atomic Electric Company.~~ The responsibility for implementing the Operational Quality Assurance Program within Vermont Yankee is vested in the Director of Operations Senior Vice President, Operations, of Vermont Yankee Nuclear Power Corporation. ~~They have~~ who has delegated certain areas of authority for the development and implementation of certain phases of the Program as set forth in the following paragraphs of this section.

Vermont Yankee retains a contracted services organization as its authorized agent for provision of certain quality assurance and related support services; selected engineering and related technical services; and various administrative and other general support services. All work affecting quality assurance performed by the approved contractor under the terms of the contractual agreement shall be conducted in accordance with the programs and procedures required by this Operational Quality Assurance Program or the contractor's approved Quality Assurance Program.

~~The Nuclear Services Division Quality Assurance Department, reporting to the President for NSD for the Yankee Site and~~

Title: Section I. Organization

Page: 1 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

reporting to the VY Director of Safety and Regulatory Affairs, for Vermont Yankee, has the organizational responsibility for the continuing review and audit of the implementation of the Operational Quality Assurance Program.

C. ORGANIZATIONAL RELATIONSHIPS

The lines of authority for of all personnel involved in the implementation of the Operational Quality Assurance Program are shown in Figures 1, and then QA-related responsibilities deferred in the following sections and-2. Integration between the Yankee Site and the Yankee Nuclear Services Division activities is provided by the Decommissioning Manager. Interfacing between the Vermont Yankee plant and any contracted service organization the Yankee Nuclear Services Division is provided by the cognizant VY organization, as stipulated in the contracts. Vermont Yankee Senior Vice President, Operations, and his staff.

The qualification requirements for those key personnel are identified in job descriptions maintained in accordance with plant Technical Specifications.

D. QUALITY ASSURANCE PROGRAM RESPONSIBILITIES

1. Yankee Nuclear Services Division

a. President

1. Assumes and maintains overall responsibility for the Operational Quality Assurance Program.

2. Delegates to the Executive Director of Quality Assurance the responsibility for establishment, control and distribution of the Operational Quality Assurance Program, and revision thereto.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- ~~3.-----Establishes-and-enforces-company-policies-in  
the-area-of-Operational-Quality-Assurance.~~
- ~~4.-----Establishes-and-implements-an-organization  
capable-of-and-directed-toward-a-proper  
Operational-Quality-Assurance-Program.~~
- ~~5.-----Resolves-disputes-between-Quality-Assurance/  
Quality-Control-personnel-and-other  
organizations,-involving-quality,-for-the  
Yankee-Site-and-the-NSD-organization.~~
- ~~6.-----Responsible-for-Yankee-Site-nuclear-safety.~~
- ~~7.-----Review-and-approve-all-changes-to-the  
Operational-Quality-Assurance-Program.~~

~~h.-----Vice-Presidents~~

- ~~1.-----Report-to-the-President.~~
- ~~2.-----Provide-for-implementation-of-the-Program  
within-their-respective-departments.~~
- ~~3.-----Review-all-changes-to-the-Operational-Quality  
Assurance-Program.~~
- ~~4.-----Provide-for-independent-review-and-acceptance  
for-selected-plant-repairs-and-engineering  
changes.~~
- ~~5.-----Ensure-that-applicable-Program-procedures-are  
implemented.~~

(MOVED SECTION I.C.1.c. Director of Quality Assurance, TO SECTION I.C.3.d

Title: Section I. Organization

Page: 3 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

d. ~~Training Coordinator~~

1. ~~Reports to the Human Resources Manager.~~
2. ~~Responsible for implementation of training programs at NSD.~~
3. ~~Assists the company in accomplishing its goals through development of skills and knowledge.~~
4. ~~Ensures that personnel are provided with both the technical and professional skills required to solve problems, work together effectively, present information, and respond to sponsor needs.~~
5. ~~Provides training needs assessments to ensure that organizationally relevant training is provided.~~
6. ~~Conducts training evaluations to determine when desired objectives are obtained.~~

e. ~~Decommissioning Manager~~

1. ~~Reports to the President.~~
2. ~~Directs engineering, licensing, cost control and planning, and site decommissioning activities.~~
3. ~~Coordinates YAEC resources to meet decommissioning needs.~~
4. ~~Provides for implementation of Operational Quality Assurance Program within the Decommissioning Organization.~~

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

5.-----Ensures that applicable Program procedures are implemented within the Decommissioning Organization.

6.-----Provides for independent review and acceptance for selected plant repairs and all safety-related engineering design changes for the site and decommissioning work packages.

7.-----Provides for review of material service purchase requests, drawings, specifications, and appropriate procedures.

8.-----Provides, through the Decommissioning Organization, for integration between the Yankee Site and the Yankee Nuclear Services Division.

f.-----Project Managers

1.-----Reports to a Vice President.

2.-----Provides for implementation of the Program within their respective project.

3.-----Ensures that applicable Program procedures are implemented within their respective project.

4.-----Provides for independent review and acceptance for selected plant repairs and all safety-related engineering design changes for their respective plant.

5.-----Provides for selected review of material service purchase requests, drawings, specifications and appropriate procedures.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~6.-----Coordinates engineering requirements necessary to support changes related to the operation of the plant.~~

~~7.-----Provides, through Engineering, for the Quality Assurance/Quality Control Standards and/or requirements on all applicable documents.~~

~~8.-----Provides direction to the Project Engineering Managers.~~

MOVED SECTION I.C.2.g. Management of Quality Assurance, to SECTION I.C.3.e.

~~h.-----Engineering Services Manager~~

~~1.-----Reports to a Vice President.~~

~~2.-----Provides for implementation of the Program within his/her function.~~

~~3.-----Ensures that applicable Program procedures are implemented within his function.~~

~~4.-----Coordinates Yankee technical requirements necessary to support activities related to outside engineering services.~~

~~i.-----Director of Environmental Engineering~~

~~1.-----Reports directly to a Vice President.~~

~~2.-----Provides for the review and follow of radiation protection programs and activities at the plant or site.~~

~~3.-----Provides for technical assistance to the plant or site on matters of radiological protection.~~

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

radiological-engineering-and-environmental  
protection-

4.----Coordinates-the-implementation-and-maintenance  
of-radiological-environmental-surveillance  
programs-concerning-radioactive-effluents-from  
the-plant-

5.----Supports-the-implementation-and-maintenance-of  
the-Emergency-Plan-pursuant-to-state-and  
federal-regulatory-requirements-

6.----Provides-for-the-review-of-plant-meteorological  
monitoring-data-

7.----Coordinate-the-radiological-and-environmental  
engineering-requirements-necessary-to-support  
changes-related-to-operation-of-the-plant-or  
site-

j.----Director of Fuel Management

1.----Reports-directly-to-a-Vice-President-

2.----Performs-fuel-cycle-and-economic-studies-to  
improve-power-costs-and-as-requested-by  
management-

3.----Provides-for-the-general-supervision-and  
coordination-of-all-core-component-design-and  
procurement,-nuclear-material-and-services  
procurement-and-fuel-cycle-economic-activities-

4.----Ensures-that-the-Operational-Quality-Assurance  
Program-and-the-applicable-procedures-are  
implemented-within-the-department-



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

5.-----Issues-bid-invitations,-evaluates-proposals,-  
and-negotiates-contracts-for-fuel-cycle  
services-and-related-material-requirements.-

6.-----Coordinates-the-fuel-cycle-requirements  
necessary-to-support-changes-related-to  
operation-of-the-plant.-

7.-----Provides-support-of-spent-fuel-storage  
activities-at-the-Yankee-Site.-

k.-----Director of Environmental Laboratory

1.-----Reports-directly-to-a-Vice-President.-

2.-----Provides-for-the-radiochemical-processing-of  
environmental,-effluent,-and-waste-samples.-

3.-----Provides-for-the-processing-and-internal  
dosimetric-evaluation-of-bioassay-samples.-

4.-----Provides-for-the-routine-*in-situ* measurements  
in-support-of-environmental-Technical  
Specifications-as-well-as-ad-hoc-emergency  
response-*in-situ* measurements-or-emergency  
response-laboratory-sample-measurements.-

5.-----Provides-and-coordinates-technical-quality  
assurance-programs-in-the-areas-of-plant  
chemistry-(radiological-only)-and-whole-body  
counting.-

6.-----Provides-for-the-processing-of-personnel,-  
extremity,-and-environmental-dosimetry-needed  
to-support-NRC-and-plant-radiological  
assessment-requirements.-

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

7.----Provides-for-the-necessary-special-radiation  
flux-measurements.

8.----Provides-for-on-site-support-during-outages-in  
the-personnel-dosimetry,-whole-body-counting,  
and-health-physies-areas.

9.----Provides-for-the-general-engineering-and  
technical-support-in-the-broad-areas-of  
radiation-measurements,-health-physies,  
radiochemistry,-and-quality-assurance.

1.----Director of Nuclear Engineering

1.----Reports-directly-to-a-Vice-President.

2.----Performs-nuclear-engineering-and-economic  
studies-requested-by-management.

3.----Provides-for-the-general-supervision-and  
coordination-of-reactor-physies,-safety  
assessment,-transient-analysis,-and-loss-of  
coolant-analysis-activities.

4.----Ensures-that-the-Operational-Quality-Assurance  
Program-and-the-applicable-procedures-are  
implemented-within-the-department.

5.----Coordinates-engineering-analysis-requirements  
necessary-to-support-changes-related-to  
operation-of-the-plant-or-site.

m.----Plant Support Department Manager

1.----Reports-directly-to-a-Vice-President.

2.----Provides-for-the-general-supervision-and  
coordination-in-the-areas-of-materials

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~evaluation, operational services (including construction services), and drafting/design support.~~

~~3. Provides for the Plant Support review of design changes.~~

~~4. Provides engineering services to the Projects Departments, upon request.~~

~~5. Responsible for the administration of the NDE/ANSI-N45.2.6 Training and Certification Programs. (To maintain the independence of the NDE/ANSI-N45.2.6 training and certification process, overall responsibility for appointing the NDE/ANSI-N45.2.6 Level III Examiner will remain with the Executive Director of Quality Assurance. All requirements for certification shall be met prior to appointment as Level III Examiner.)~~

~~n. Engineering and Licensing Manager~~

~~1. Reports to the Decommissioning Manager.~~

~~2. Responsible for coordination of activities pertaining to State, Federal, and license requirements.~~

~~3. Provides for independent review and acceptance for selected plant repairs, all safety-related engineering design changes and decommissioning work packages for the site.~~

~~4. Provides for review of material service purchase requests, drawings, specifications, and appropriate procedures.~~

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

5.-----Coordinates-and-directs-engineering-services  
necessary-to-support-the-decommissioning-of-the  
site.

6.-----Assures-coordination-and-implementation-of-the  
Emergency-plan.

7.-----Assures-engineering-activities-are-conducted-in  
accordance-with-the-Quality-Assurance-Program.

8.-----Assures-the-Quality-Assurance/Quality-Control  
standards-and/or-requirements-are-provided-on  
all-applicable-documents.

0.-----Automation-Technology-Department-(ATD)-Manager

1.-----Reports-to-a-Vice-President.

2.-----Provides-engineering-software-development-and  
support-services-to-NSD-departments,-sponsor  
plants,-and-other-clients,-as-requested-or  
contracted.

3.-----Provides-automated-plant-systems-development  
and-support-services-for-sponsor-plants-and  
other-clients,-as-requested-or-contracted.

4.-----Provides-and-implements-advanced-analytical-and  
computational-methods-and-systems-to-NSD,  
sponsors,-and-other-clients.

2.-----Plant---Yankee

a.-----Site-Manager/Manager-of-Operations

1.-----Reports-directly-to-the-Decommissioning  
Manager.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- 2.---Responsible for the safe, orderly and efficient operation of the site, and for compliance with the requirements of the license and applicable State and Federal laws and regulations.
  - 3.---Responsible for the on-site implementation of the Operational Quality Assurance Program.
  - 4.---Responsible for the control and surveillance of all special nuclear material at the site.
  - 5.---Provides information and reports to the Yankee Nuclear Services Division as required and as directed by the Decommissioning Manager.
  - 6.---Provides for and coordinates review of industry operating problems with the aim of minimizing likelihood of occurrence at the plant.
  - 7.---Designates an alternate to the Site Manager/ Manager of Operations during his/her absence with the authority and responsibility thereof.
  - 8.---Maintains communications with the Training Coordinator involving plant training needs.
  - 9.---Evaluates the site's position on specified in-plant audit discrepancies and prepares "Implementation Directives" for the site.
- b.---Plant Superintendent
- 1.---Reports directly to the Site Manager and Manager of Operations.
  - 2.---Directly responsible for the safe, orderly, and efficient operation of the Site for compliance with the requirements of the license and

Title: Section I, Organization

Page: 12 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

applicable-State-and-Federal-laws-and  
regulations.

3.-----Responsible-for-shift-supervisors-and  
operations-support.

4.-----Administration-of-the-Certified-Fuel-Handlers  
Training-Program.

5.-----Administration-of-the-Equipment-Operators  
Training-Program.

6.-----Coordinates-Plant-Quality-Assurance-activities  
with-the-Manager-of-Operations-and  
Decommissioning-Manager.

7.-----Responsible-for-security,-maintenance,-  
operations,-technical-services,-including-the  
Security-and-Fire-Protection-Programs.

8.-----Coordinates-testing-of-plant-hydro  
requirements.

9.-----Acts-as-Chairman-of-the-Plant-Operations-Review  
Committee-with-authority-and-responsibility-as  
established-in-the-Technical-Specifications-of  
the-site-license.

10.-----Maintains-core-component-history-file-of-all  
fuel,-control-rods,-sources-and-incore  
detectors.

11.-----Accounts-for-all-special-nuclear-material-at  
the-plant-site.

12.-----Responsible-for-site-maintenance-and-repair.

Title: Section I, Organization

Page: 13 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

13.---Directs the activities of Mechanical and  
Electrical Maintenance, Instrumentation and  
Control and Maintenance Engineering.

e. ---Shift Supervisors

1.---Report directly to the Operations Supervisor,  
who reports to the Plant Superintendent.

2.---Responsible for plant operations in accordance  
with approved documents and specifications.

3.---Responsible for preparing documents outlining  
system functions and operating modes.

4.---Responsible for ensuring that personnel under  
their supervision perform their duties  
according to applicable licenses,  
specifications, safety rules, regulations, and  
certifications.

5.---Responsible for ensuring that maintenance  
requests are provided for the repair or  
replacement of defective parts and/or  
components.

6.---Responsible for verifying the operability of  
systems and/or components following maintenance  
or changes by providing for the performance of  
written test documents which incorporate the  
requirements and acceptance criteria contained  
in applicable design documents.

7.---Responsible for ensuring that fuel handling  
operations are safely performed in accordance  
with approved procedures.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

8.-----Responsible for coordination and performance of hydrotesting.

d.-----Construction Manager

1.-----Reports directly to the Site Manager/Manager of Operations.

2.-----Coordinates the review and update of plant drawings and specifications.

3.-----Directs plant design changes and assures compliance with applicable State, Federal, and license requirements.

4.-----Prescribes and directs schedules and programs, as necessary, to assure the safe decommissioning of the site.

5.-----Provides for major contractor decommissioning support including establishment of appropriate contractual arrangements.

6.-----Ensures that contractor decommissioning activities are performed in a safe manner.

7.-----Directs on-site engineering and craft support of decommissioning activities.

8.-----Coordinates and transmits information concerning Plant changes to the Manager of Operations and Decommissioning Manager.

e.-----Training Coordinator

1.-----Reports directly to the Site Manager/Manager of Operations.



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

2.----Responsible-for-scheduling-and-documentation-of  
plant-general-employee-training.

3.----Responsible-for-administration-of-all-plant  
staff-training.

f.----Site Services Supervisor

1.----Reports-directly-to-the-Site-Manager/Manager-of  
Operations.

2.----Supervises-the-Store-Supervisor.

a)----Preparation-of-requisition-for-purchase  
orders.

b)----The-receipt,-handling,-and-storage-of  
materials-and-equipment.

c)----Administering-a-system-of-material-and  
equipment-identification.

d)----Maintaining-a-system-which-provides  
traceability-and-retrievability-of  
Quality-Assurance-documentation-for  
purchased-materials.

3.----Coordinates-the-review,-revision,-and  
distribution-of-procedures.

4.----Responsible-for-the-operations-of-the-Plant  
Document-Control-Center-for-the-retention-of  
specified-Quality-Assurance-records,-reports,-  
and-personnel-records.

5.----Maintains-and-disseminates-information  
regarding-codes,-criteria,-standards.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~guidelines, and policy to applicable plant personnel.~~

~~6. Supervises Plant Administrative personnel.~~

~~7. Responsible for the Fitness for Duty Program.~~

~~g. Radiation Protection and Chemistry Manager~~

~~1. Reports directly to the Site Manager/Manager of Operations.~~

~~2. Directs maintenance of water conditioning on the site as per specifications and/or documented and authorized recommendations.~~

~~3. Has direct access to the Plant Superintendent for matters relating to radiological health and safety of employees and the public.~~

~~4. Directs a program to ascertain the radioactivity levels of liquids, gases and solids as required.~~

~~5. Directs the review and interpretation of chemistry test results.~~

~~6. Directs the documentation and maintenance of chemistry and radiation protection records.~~

~~7. Responsible for the development and implementation of the Radiation Protection Program (including ALARA), assuring that these programs meet site standards and State and Federal license requirements.~~

~~8. Directs the maintenance of the Personnel Exposure Record System.~~

Title: Section I, Organization

Page: 17 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

9.-----Directs-radioactive-material-shipments-and  
receipts-pursuant-to-site-and-government  
regulations.

10.-----Maintain-stop-work-authority-when-radiological  
safety-is-jeopardized-or-when-unnecessary  
personnel-exposure-is-occurring.

h.-----Health-and-Safety-Manager

1.-----Reports-directly-to-the-Site-Manager/Manager-of  
Operations.

2.-----Directs-the-plant-Medical-Services-Program-and  
acts-as-plant-management's-point-of-contact  
relative-to-medical-matters-in-coordination  
with-the-Plant-Medical-Consultant.

3.-----Directs-the-maintenance-of-personnel-medical  
records.

4.-----Responsible-for-the-development-and  
implementation-of-the-plant-Occupational-Safety  
programs--assuring-that-these-programs-meet  
site-standards-and-Federal-OSHA-requirements.

5.-----Responsible-for-review-and-communication-of  
plant-safety-policies-through-the-plant-safety  
manual-and-safety-meetings.

6.-----Responsible-for-work-site-inspections-by-safety  
department-personnel.

7.-----Acts-to-safeguard-worker-health-and-safety.

8.-----Directs-the-review-and-interpretation-of  
occupational-safety-exposure-monitoring.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~9. Directs the maintenance of personnel exposure  
monitoring record system.~~

13. Vermont Yankee Nuclear Power Corporation

a. Director of Senior Vice President, Operations

1. Reports to the President - Vermont Yankee Nuclear Power Corporation.
2. Ensures the QA Program is effectively implemented.
3. Dispositions In-Plant Audits and issues concurrence directives ~~to the plant.~~
4. Ensures that applicable programs and procedures effectively implement the QA Program.
5. Reviews and approves all changes to the Operational Quality Assurance Program.
6. Appoints the NSAR Committee members including Chairman and Vice Chairman.
7. Acts as the Manager of Operations.

b. Vice President, Engineering

1. Reports to the President.
2. Has overall responsibility for design and plant engineering. Oversees the planning, scheduling, and direction of activities of employees engaged in design changes, alterations, and systems readiness.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

3. Provides for review and approval of safety-related design change documents, selected plant programs and policies.
  4. Provides for review and approval of drawings and specifications.
  5. Provides for interfacing between the Plant and Engineering.
  6. Responsible for Fire Protection.
  7. Ensures that applicable programs and procedures effectively implement the QA Program.
- cb. Director of Safety and Regulatory Affairs
1. Reports to the President---VYNPG
  2. Oversees the activities of the Quality Assurance Department.
  3. Oversees the development, implementation, and maintenance of the Quality Assurance Program and implementing procedures. Reviews all changes to the QA Program.
  4. Acts as the Chairman of the NSARC.
  5. Evaluates In-Plant Audits and recommends disposition to the Director of Senior-Vice President, Operations.
  6. Provides for the review of and compliance with federal and state regulations and standards for nuclear power facilities.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

de. Executive Director of Quality Assurance

1. Reports directly to the Director of Safety and Regulatory Affairs President.
2. Establishes the qualification requirements for the principal Quality Assurance management positions to assure competence commensurate with responsibility. See Appendix A.
3. Reviews ~~Approves~~ all changes to the Operational Quality Assurance Program.
4. Reviews or recommends ~~provides~~ company policy relative to Quality Assurance practices ~~conducted at the Site and Yankee Nuclear Services Division.~~
5. Authorizes personnel performing Quality Assurance functions to have direct access to management levels which will assure accomplishment of quality-affecting activities.
6. Establishes policies under which the ~~Nuclear Services Division~~ Quality Assurance Department functions.
7. Provides for preparation, ~~establishment of, and control~~, and distribution of the Operational Quality Assurance Program and revisions thereto.
8. Provides for implementation of the Program within the Quality Assurance Department.
9. Provides to NSARC a periodic review of the Operational Quality Assurance Program to determine the adequacy and effectiveness of the

Title: Section I. Organization

Page: 21 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

Program. Provide for evaluations of changes to the Quality Assurance Program to the requirements of 10CFR50.54(a)(3).

10. Provides, through the Quality Assurance Department, for independent verification of site operation by individuals or groups who do not have direct responsibility for performing the work, to assure that applicable approved procedures, specifications, licenses and safety regulations are satisfied.

11. Ensures that personnel performing Quality Assurance functions have sufficient authority and organizational freedom to:

- a. identify quality problems.
- b. initiate, recommend, or provide solutions through designated channels, and
- c. verify implementation of solutions.

~~12. Provides for review of and compliance with federal and state regulations and standards for nuclear power facilities.~~

123. As directed by the Vermont Yankee Director of Safety and Regulatory Affairs, assures that the QA Program is effectively implemented.

134. Appoints the NDE and N45.2.6 Level III Examiner

eg. Manager-Management of Operational Quality Assurance

~~Quality Assurance is divided into two (2) departments. They are the Quality Support Department (QSD) and the Quality Assessment Department (QAD).~~

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~The Quality Assessment Department performs audits and surveillances at Vermont Yankee and audits, surveillances, inspections at the Yankee Site, and audits and surveillances at the Corporate Engineering office. The Quality Support Department performs audits and surveillances at vendor facilities.~~

1. ~~The Manager of each department~~ Reports directly to the Executive Director of Quality Assurance.
2. Assures ~~Both department managers~~ assure that the Operational Quality Assurance Program satisfies the requirements of 10CFR50 Appendix B and ANSI N18.7-1976.
3. ~~The QAD Manager~~ Provides for the audit of design changes and specifications to verify adequacy of quality requirements. Independent review shall be performed by an uninvolved, but technically knowledgeable person in the engineering discipline.
4. ~~The QSD Manager~~ Provides for the audit, inspection and/or surveillance of contractor/vendor activities for operating plants to assure the effectiveness of contractual interfaces and compliance with the applicable criteria of 10CFR50, Appendix B and ANSI N18.7-1976.
5. ~~The QAD Manager provides for the inspection (Yankee Plant only), surveillance and/or audit of activities pertaining to plant or site repairs, and/or changes.~~
56. ~~Both department managers~~ Provides for the training and retraining of Quality Assurance

Title: Section I. Organization

Page: 23 of 46

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

personnel in quality assurance and audit techniques.

- ~~67.~~ ~~Both-department-managers~~ Ensures through verification that the Program is implemented for all activities requiring Quality Assurance.
- ~~78.~~ ~~Both-department-managers~~ Provides for the stoppage of unsatisfactory work; and for the control of further processing or delivery of nonconforming material.
- ~~89.~~ ~~The-QAD-Manager~~ Directs the independent verification through audits and surveillances of plant or site operational activities to assure that applicable approved procedures, specifications, licenses, and safety regulations are satisfied.
- ~~910.~~ ~~The-QAD-Manager~~ Ensures that the QA Program is modified and/or revised as standards, regulations and experience dictate.
10. Ensures that applicable QA Department Programs and Procedures effectively implement the QA Program.
- ~~fe.~~ Procurement Manager ~~Director-of-Procurement~~
1. Reports to the Direction of Administration ~~and President-Finance-and-Treasurer.~~
  2. Responsible for procurement and receipt inspection of all materials and services required for operations and continued maintenance of the facility.

Title: Section I, Organization

Page: 24 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

3. Oversees the storage and preservation of materials.
4. Responsible for ensuring regulatory compliance for materials and services procured, stored, and utilized in the plant's safety-related systems.

gd. Director of Design Engineering

1. Reports to the ~~Senior~~ Vice President, Engineering Operations.
2. ~~Has overall responsibility for design and plant engineering.~~ Oversees the planning, scheduling, and direction of activities of employees engaged in design changes and alterations.
3. Reviews and approves safety-related design change documents, selected plant programs and policies.
4. Provides for review and approval of drawings and specifications.
5. Provides for interfacing between the Plant and Engineering ~~the Yankee Nuclear Services~~ Division.

he. Training Manager

1. Reports to the Director of Senior Vice President, Operations.
2. Establishes and maintains all operator and plant training programs.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

3. Remains current on all regulatory requirements concerning training and qualifications of plant personnel and ensures that Plant training programs and procedures are revised in a timely manner in response to changing needs and regulations.
4. Provides overall coordination and supervision for the Technical Support Training Supervisor, the Engineering and Maintenance Training Supervisor, the Operations Training Supervisor, and the Training Support Supervisor in carrying out their duties.
5. Evaluates the effectiveness of the training programs and the performance of the individuals participating in the training.

if. System Engineering Manager

1. Reports to the Senior Vice President, Engineering Operations.
2. Provides engineering support to Operations and Maintenance departments.
3. Assesses the performance of plant systems and makes recommendations for improvement.
4. Oversees and manages programs associated with the systems engineering function. Includes Maintenance Rule.
5. Responsible for electrical and mechanical systems engineering.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

6. Maintains formal documentation associated with system engineering programs for required operational and license requirements.
7. Fulfills other responsibilities common to all supervisory positions and carries out other duties and responsibilities as may be assigned by the Vice President, Director of Engineering.

24. Plant - Vermont Yankee

a. Plant Manager

1. Reports to the Director of Senior Vice President, Operations.
2. Directs the on-site implementation of the Operational Quality Assurance Program.
3. Prescribes and directs the development of Plant procedures, instructions, schedules, and programs as necessary to assure the safe and dependable operation of the facility.
4. Maintains a thorough knowledge of, and assures compliance with, the regulatory requirements for operating a nuclear power plant.
5. Directs the preparation and maintenance of power plant records, reports, and logs.
6. Acts as Chairman of the Plant Operations Review Committee with authority and responsibility as established in the Technical Specifications of the plant operating license.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~7. Provides information and reports to the Yankee Nuclear Services Division as directed by the Senior Vice President, Operations.~~

78. Provides information and reports to the Nuclear Safety Audit and Review Committee as required and as directed by the Director of Senior Vice President, Operations.

89. Directs the control and surveillance of all special nuclear material on site.

910. Assures the implementation of training/retraining programs as required by the Plant license, regulations, or applicable standards; and as necessary to assure safe work practices and compliance with standard operating practices, license and Technical Specifications, safety rules, and applicable regulations.

b. Maintenance Superintendent

1. Reports to the Plant Manager.

2. Oversees planning, scheduling, coordination, and direction of activities of employees engaged in the installation, inspection, and maintenance of all equipment, buildings, and structures as appropriate. Is responsible for the Electrical & Control Maintenance, Work Control and Mechanical Maintenance and Facilities areas, and Instrumentation and Control areas.

3. Assists in the development of Plant procedures, instructions, schedules, and programs as

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

necessary to assure the safe and dependable maintenance of the facility.

4. Maintains a thorough knowledge of, and assures compliance with, the regulatory requirements for maintenance of a nuclear power plant.
5. Acts as Vice Chairman of the Plant Operations Review Committee with responsibilities as established in the Technical Specifications of the plant operating license.
6. Directs the preparation and maintenance of power plant records, reports, and logs as applicable.
7. Provides information, reports, and records as directed by the Plant Manager.
8. Assists in directing the establishment of safe work practices, and the training and instruction of plant personnel in the observance of standard operating practices, NRC license and Technical Specifications, safety rules and regulations.

c. Technical Services Superintendent

1. Reports to the Plant Manager.
2. Responsible for the Reactor-Engineering-  
Security, Radiation Protection, Technical Support, and Chemistry Departments.
3. Assists in the development of Plant procedures, instructions, schedules, and programs as necessary to assure the safe and dependable

Title: Section I, Organization

Page: 29 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

operation of the facility and the safe conduct of refuel operations.

4. Maintains a thorough knowledge of, and assures compliance with, the regulatory requirements of a nuclear power plant.
5. Acts as Vice Chairman of the Plant Operations Review Committee with responsibilities as established in the Technical Specifications of the plant operating license.
6. Directs the preparation and maintenance of power plant records, reports, and logs as applicable.
7. Provides information, reports, and records as directed by the Plant Manager.
8. Assists in directing the establishment of safe work practices, and the training and instruction of plant personnel in the observance of standard operating practices, NRC license and Technical Specifications, safety rules and regulations.

d. Operations Superintendent

1. Reports to the Plant Manager.
2. Responsible for the Operations and the Reactor Engineering Departments.
3. Has the responsibility and authority for insuring the safe and efficient operations of the plant and its supporting systems in accordance with applicable station licenses, technical specifications, procedures.

Title: Section I, Organization

Page: 30 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

instructions, established company policy and safety rules.

4. Acts as Vice Chairman of the Plant Operations Review Committee with responsibilities as established in the Technical Specifications of the plant operating license.

ed. Operations Manager

1. Reports to the Operations Superintendent Plant Manager.
2. Has the responsibility and authority for insuring the safe and efficient operation of the plant and its supporting systems in accordance with applicable station licenses, Technical Specifications, procedures, instructions, established company policy and safety rules.
3. Consistent with plant policies and applicable instructions, institutes necessary programs, issues instructions, originates procedures and insures that department administrative systems exist such that the responsibilities assigned to the Operations Department are executed effectively and efficiently in accordance with company intent. Insures that necessary documentation is prepared, reviewed, approved, and properly processed to verify that department activities meet all established requirements.
4. Maintains current status of Operations Department activities and requirements. Prepares and maintains, plans and schedules for

Title: Section I. Organization

Page: 31 of 46

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

department commitments such as personnel training, retraining and qualification.

5. Insures that all records, tests, reports, and logs maintained by the Operations Department are properly reviewed and approved.
6. Insures that all Operations Department personnel in a training status are actively pursuing the established program and that their performance is being adequately evaluated.
7. Reviews all Operations Department procedures to insure that they are current, accurate, and approved.
8. Implements aspects of the Plant Quality Assurance Program which relate to the activities of the Operations Department.

fe. Project Engineering Manager

1. Reports to the Vice President, Director of Engineering.
2. Oversees and manages the Project Engineering efforts necessary to support emergency needs of the plant.
3. Provides for the generation of project plans, schedules budget, manloadings, etc. necessary to support field activities.
4. Manages the contracts, contractors used to accomplish projects, and oversee project implementation.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

5. Develops maintenance and oversight of implementation of programs and procedures associated with Project Engineering.
6. Maintains formal documentation of Project Engineering activities for required operation and license requirements.
7. Fulfills other responsibilities common to all supervisory positions and carries out other duties and responsibilities as may be assigned by the Director of Engineering.
8. Manages the Fire Protection Program.

gf. Technical Support Manager

1. Reports to the Technical Services Superintendent ~~Director of Engineering~~.
2. Oversees and manages programs associated with the technical/administrative supports areas.
3. Maintains formal documentation associated with the technical and administrative activities for required operational and licensee documentation.
4. Fulfills other responsibilities common to all supervisory positions and carries out other duties and responsibilities as may be assigned by the Technical Services Superintendent ~~Director of Engineering~~.

~~5. Oversees and manages Fire Protection Program.~~

hg. Electrical Design Engineering Manager

Title: Section I, Organization

Page: 33 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

1. Reports to the Director of Design Engineering.
2. Design authority for the electrical and instrumentation & control engineering efforts necessary to support the normal and emergent needs of the plant.
3. Oversee and manage programs associated with design engineering.
4. Provide for the generation of design change and installation documents, and support for the installation of these design changes and the close-out of associated documentation.
5. Maintain formal documentation of plant design basis and design change activities for required operational and license requirements.

Nuclear Services Manager

- ~~1. Reports to the Director of Engineering.~~
- ~~2. Design authority for programs associated with nuclear services including the areas of nuclear and environmental engineering and fuel management.~~
- ~~3. Maintains formal documentation associated with nuclear services for required operational and license requirements.~~
- ~~4. Provides administrative support for NSD employees at the plant site.~~
- ~~5. Fulfills other responsibilities common to all supervisory positions and carries out other~~

Title: Section I. Organization

Page: 34 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~duties and responsibilities as may be assigned  
by the Director Engineering.~~

i. Fluid Systems Engineering Manager

1. Reports to the Director of Design Engineering.
2. Design authority for the system engineering efforts necessary to support the normal and emergency needs of the plant.
3. Oversee and manage programs associated with design engineering.
4. Provide for the generation of design change and installation documents, and support for the installation of these design changes and the close-out of associated documentation.
5. Maintain formal documentation of plant design basis and design change activities for required operational and license requirements.

ii. Mechanical/Structural Design Engineering Manager  
Design Engineering Managers

1. Reports to the Director of Design Engineering.
2. Design authority for the electrical/I&C/mechanical structural ~~fluid~~ systems engineering efforts necessary to support the normal and emergent needs of the plant.
3. Oversee and manage programs associated with design engineering.
4. Provide for the generation of design change and installation documents, and support for the

Title: Section I, Organization

Page: 35 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

installation of these design changes and the close-out of associated documentation.

5. Maintain formal documentation of plant design basis and design change activities for required operational and license requirements.
6. Fulfill other responsibilities common to all supervisory positions and carries out other duties and responsibilities as may be assigned by the Director of Engineering.

k+. Electrical & Controls Maintenance Manager

1. Reports to the Maintenance Superintendent.
2. Plans, schedules and supervises the activities of the Electrical and Controls Department. Such activities to include; installation, inspection, calibration, adjustment, maintenance, and repair of the plant electrical and controls equipment.
3. Coordinates the activities of the Electrical and Controls Department with all other plant functions.
4. Establishes and directs a program of preventive maintenance, calibration, and surveillance testing as required by the plant license, approved plant procedures, or other plant requirements.
5. Establishes calibration techniques, frequencies, and records as necessary to assure reliable indication and control for plant system parameters.

Title: Section I, Organization

Page: 36 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

6. Establishes and directs a program of departmental training that will assure a staff of Electrical and Controls personnel capable of safely and efficiently performing their duties in accordance with established practices, procedures, and regulations.
7. Prepares and/or supervises the preparation of reports, logs, and historical records as required.
8. Implements those aspects of the Plant Quality Assurance Program which relate to the activities of the Electrical and Controls Department.
9. Develops and maintains, in accordance with approved plant procedures, the procedural controls necessary to fulfill the above responsibilities.

1j. Mechanical Maintenance and Facilities Manager

1. Reports to the Maintenance Superintendent.
2. Is responsible for mechanical maintenance activities throughout the plant.
3. Consistent with plant policies and applicable instructions, institutes necessary programs, issues instructions, originates procedures, and insures that department administrative systems exist such that the responsibilities assigned to the Mechanical and Facilities Maintenance Department are executed effectively and efficiently in accordance with company intent. Insures that necessary documentation is prepared, reviewed, approved, and properly

Title: Section I, Organization

Page: 37 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

filed to establish that department activities meet all requirements.

4. Consistent with plant policies and applicable instructions, organizes department functions and activities, assigns duties, and schedules personnel to accomplish department requirements. Reviews and supervises all department assignments.
5. Maintains current status of department activities and requirements. Prepares and maintains long-range plans and schedules for department commitments such as personnel training and qualification, plant modifications, etc.
6. Staffs and trains Mechanical Facilities Maintenance Department personnel.
7. Implements aspects of the Plant Quality Assurance Program which relate to the activities of the Mechanical Facilities Maintenance Department.
8. Reviews mechanical ~~and electrical~~ equipment failure frequency and evaluates equipment reliability.
9. Assumes responsibility for the condition, maintenance, and reliability of all plant mechanical equipment other than that specifically assigned to other departments.

mk. Work Control Manager

1. Reports to the Maintenance Superintendent.

Title: Section I, Organization

Page: 38 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

2. Manages the planning and scheduling of activities necessary to support the operation and maintenance of the facility.
3. Provides and maintains the necessary administrative systems and procedures to effectively perform the department's functions
4. Ensures that the department personnel supporting the operations and maintenance activities are properly trained.
5. Ensures that the maintenance planning and control data base for equipment and preventative maintenance is maintained.
6. Manages the Preventative Maintenance Program.
7. Establishes and maintains equipment history records.
8. Selects and orders materials and spare parts in areas of assigned responsibility.

n7. Chemistry Manager

1. Reports to the Technical Services Superintendent.
2. Consistent with the policies and applicable instructions, institutes necessary programs, issues instructions, originates procedures, and insures that department administrative systems exist such that the responsibilities assigned to the Chemistry Department are executed effectively and efficiently in accordance with company intent. Insures that necessary documentation is prepared, reviewed, approved.

Title: Section I, Organization

Page: 39 of 46

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

and properly filed to establish that department activities meet all requirements.

3. Consistent with plant policies and applicable instructions, organizes department functions and activities, assigns and schedules personnel to accomplish department requirements. Reviews and supervises all department assignments.
4. Maintains current status of department activities and requirements. Prepares and maintains long-range plans and schedules for department commitments such as personnel training and qualification, preventive maintenance, material procurement, plant modifications, etc.
5. Assumes responsibility for providing the necessary administrative supervision and required personnel to meet the needs of the established Radiological Environmental Monitoring Programs.
6. Prescribes and maintains chemistry conditions and purification of coolants within applicable limits.
7. Develops and maintains records of all chemistry and radiochemistry aspects of the plant.

om. Radiation Protection Manager

1. Reports to the Technical Services Superintendent.
2. Consistent with the policies and applicable instructions, institutes necessary programs, issues instructions, originates procedures, and

Title: Section I, Organization

Page: 40 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

insures that department administrative systems exist such that the responsibilities assigned to the Radiation Protection Department are executed effectively and efficiently. Insures that necessary documentation is prepared, reviewed, approved, and properly filed to establish that department activities meet all requirements.

3. Consistent with plant policies and applicable instructions, organizes department functions and activities, assigns and schedules personnel to accomplish department requirements. Reviews and supervises all department assignments.
4. Maintains current status of department activities and requirements. Prepares and maintains long-range plans and schedules for department commitments such as personnel training and qualification, preventive maintenance, material procurement, plant modifications, etc.
5. Develops and maintains records of all radioactive waste shipments.
6. Develops work and housekeeping practices in radiologically controlled areas of the plant to minimize personnel exposure and the spread of radioactive contamination.
7. Assumes responsibility for receipt, storage, shipment, and disposal of radioactive material utilizing proper Federal and State regulations (other than nuclear fuel).
8. Has direct access to the Plant Manager in all health physics matters.

Title: Section I, Organization

Page: 41 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

PA. Reactor Engineering Manager

1. Reports to the Technical-Services Operations Superintendent.
2. Plans, schedules, and supervises the activities of the Reactor Engineering Department which includes the Process Computer Engineering Group. Such activities to include: nuclear and thermal core analysis, planning and scheduling of fuel rearrangements and fuel cycling, rod withdrawal sequences, rod patterns, and reactor maneuvering during plant startup.
3. Coordinates the activities of the Reactor Engineering Department with all other plant functions. Maintains the Emergency Response Facility Information System (ERFIS) and the Safety Parameter Display System (SPDS) in support of normal and emergency plant operations.
4. Establishes and directs a program of Nuclear Performance Monitoring and Surveillance Testing as required by the plant license, approved plant procedures, or other plant requirements.
5. Establishes a program of control, accountability and record keeping as required to maintain an accurate inventory of licensed special nuclear material.
6. Establishes and directs a program of departmental training that will assure a staff of Reactor Engineering personnel capable of safely and efficiently performing their duties

Title: Section I, Organization

Page: 42 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

in accordance with established practices, procedures, and regulations.

7. Prepares and/or supervises the preparation of reports, logs, and historical records as required.
8. Implements those aspects of the Plant Quality Assurance Program which relate to the activities of the Reactor Engineering Department.
9. Develops and maintains, in accordance with approved plant procedures, the procedural controls necessary to fulfill the above requirements.

DE. REVIEW AND AUDIT

Two committees have been established for ~~Yankee~~ and the Vermont Yankee plants whose objectives are to insure the plant is operated safely, utilizing good engineering practices. The committees are charged with making recommendations to modify operational methods or safety precautions.

The Plant Operations Review Committee is made up of Plant personnel.

The Nuclear Safety Audit and Review Committee ~~for Vermont-Yankee~~ shall have no more than three members selected from the organization reporting to the Manager of Operations.

~~The Yankee Nuclear Safety Audit and Review Committee shall not be members of the plant staff.~~

Title: Section I, Organization

Page: 43 of 46

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

1. Plant Operations Review Committee

~~a. Yankee Plant---See Section 6.5 "Review and Audit" of Appendix A Defueled Technical Specifications to the Possession Only License DPR-3.~~

ab. Vermont Yankee Plant---See Section 6.2.A "Review and Audit" of Appendix A Technical Specifications to the Operating License DPR-28.

2. Nuclear Safety Audit and Review Committee

~~a. Yankee Plant---See Section 6.5.2 NSARC of the Yankee Defueled Technical Specifications to the Possession Only License No. DPR-3.~~

b. Vermont Yankee Plant

a1. See Section 6.2.B "Review and Audit" of Appendix A Technical Specifications to the Operating License DPR-28.

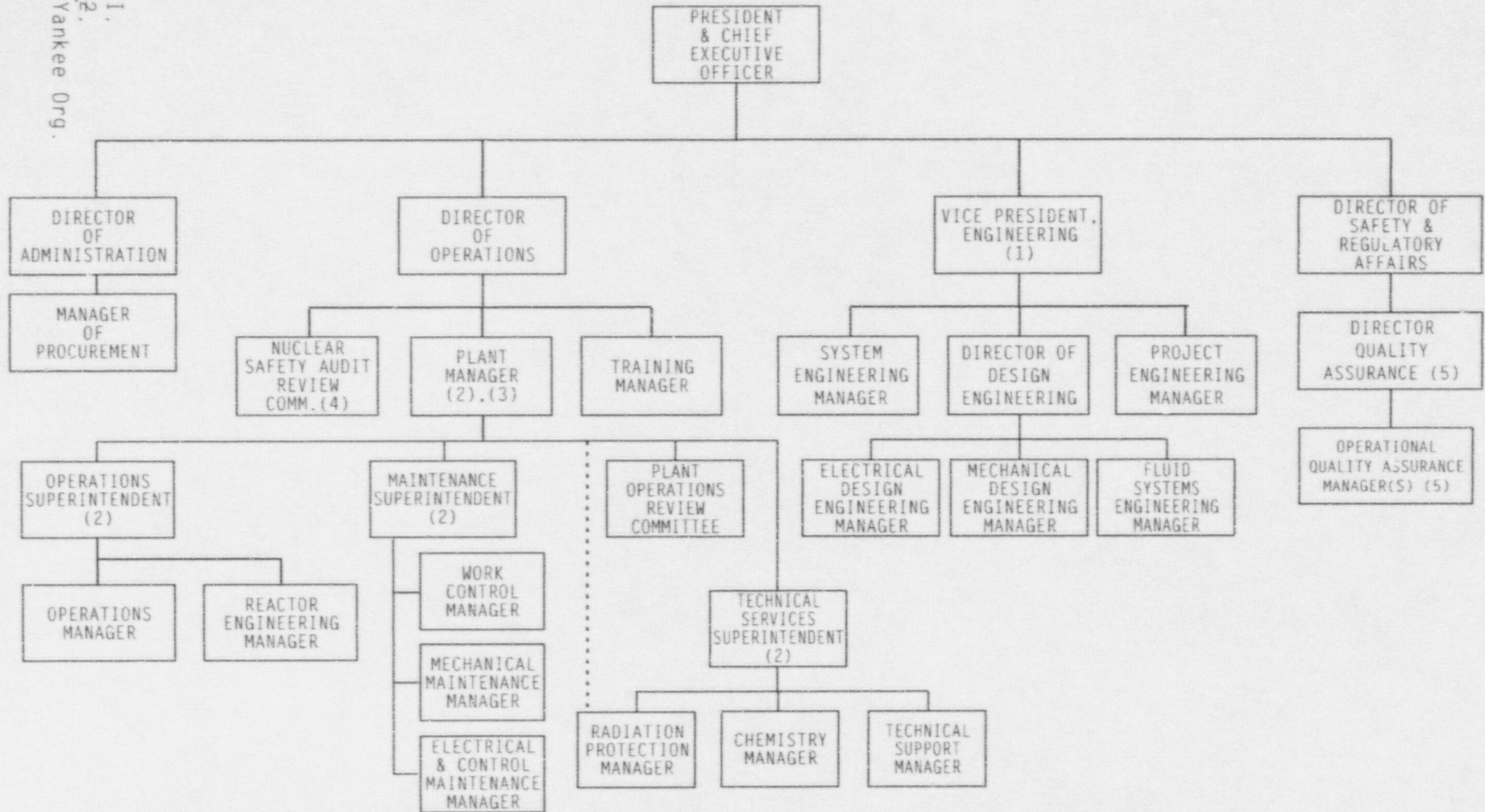
b2. The NSAR Committee shall be responsible for evaluating changes to the Vermont Yankee organizational chart (Figure 12 to Section 1).

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

REMOVED YANKEE ATOMIC ELECTRIC COMPANY ORGANIZATION CHART

| Title:---Section-I-  
|        -~~Figure-1-~~  
|        -~~Yankee-Organization~~  
| Page:---45-of-46  
| Rev:---28

VERMONT YANKEE ORGANIZATION



VERMONT YANKEE NUCLEAR POWER CORPORATION  
 YANKEE-ATOMIC-ELECTRIC-COMPANY

Notes:

- (1) Responsible for fire protection.
- (2) ANSI 18.1-1971 Re: License.
- (3) In Health Physics matters, the Radiation Protection Manager has direct access to the Plant Manager.
- (4) The committee membership and its Chairman and Vice Chairman shall be appointed by the Vermont Yankee Director of Operations.
- (5) Outsourced to approved contractor.

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

II. QUALITY ASSURANCE PROGRAM

A. SCOPE

This section establishes the criteria to be applied to systems requiring Quality Assurance which prevent or mitigate the consequences of postulated accidents which could cause undue risk to the health and safety of the public. The structures, systems, components and other items requiring quality assurance are listed in the ~~Yankee Safety Classification of Systems Manual for the Yankee plant. A listing for the Vermont Yankee plant is provided in the~~ Vermont Yankee Safety Classification Manual.

B. RESPONSIBILITIES

1. Compliance with the requirements of the Operational Quality Assurance Program - based on the criteria of Title 10 of the Code of Federal Regulations, Part 50, Appendix B, and ANSI N18.7-1976 - shall be the responsibility of all personnel involved with activities affecting operational safety. The Plant Each facility shall have a matrix of major quality assurance procedures cross referenced to each applicable criteria of 10CFR50 Appendix B. The performance of quality-related activities shall be accomplished with specified equipment under suitable environmental conditions.

Note: Each criterion section for the Program incorporates the designation of specific organizational responsibilities.

2. Individuals having direct responsibilities for establishment/distribution control/implementation of the Operational Quality Assurance Program are delineated in Section I "Organization" of the Program.

Title: Section II, Quality Assurance Program

Page: 1 of 7

Rev.: 1 28



~~YANKEE-ATOMIG-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

C. IMPLEMENTATION

Establishment of an effective Operational Quality Assurance Program is assured through consideration of and conformance with the Regulatory Position in the below listed Regulatory Guides as modified in Appendix B. Implementation of this Program is assured through Quality Assurance procedures derived from Quality Assurance policies, goals and objectives. The Quality Assurance Department shall review Quality Assurance program procedures to assure their derivation from the policies, goals and objectives established by the President.

1. Title 10 of the Code of Federal Regulations, Part 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants
- \* 2. ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.33, Revision 2)
3. ANSI N45.2.1-1973, Cleaning of Fluid Systems and Associated Components During Construction Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.37, March 16, 1973)
- \* 4. ANSI N45.2.2-1972, Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants (Endorsed by Regulatory Guide 1.38, Revision 2)
- \* 5. ANSI N45.2.3-1973, Housekeeping During the Construction Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.39, Revision 2)
6. ANSI N45.2.4-1972, Installation, Inspection and Testing Requirements for Instrumentation and Electric Equipment During the Construction of Nuclear Power Generating Plants (Endorsed by Regulatory Guide 1.30, August 11, 1972)

Title: Section II, Quality Assurance Program  
Page: 2 of 7  
Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

7. ANSI N45.2.5-1974, Supplementary Quality Assurance Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.94, Revision 1)
- \* 8. ANSI N45.2.6-1978, Qualification of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.58, Revision 1)
9. ANSI N45.2.8-1975, Supplementary Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems for the Construction Phase of Nuclear Power Plants (Endorsed by Regulatory Guide 1.116, Revision 0-R)
- \* 10. ANSI N45.2.9-1974, Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants (Endorsed by Regulatory Guide 1.88, Revision 2)
- \* 11. ANSI N45.2.10-1973, Quality Assurance Terms and Definitions
12. ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants (Endorsed by Regulatory Guide 1.64, Revision 2)
13. ANSI N45.2.12-1977, Requirements for Auditing of Quality Assurance Program for Nuclear Power Plants (Endorsed by Regulatory Guide 1.144, Revision 1)
14. ANSI N45.2.13-1976, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants (Endorsed by Regulatory Guide 1.123, Revision 1)

Title: Section II, Quality Assurance Program

Page: 3 of 7

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

15. ANSI N45.2.23-1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants (Endorsed by Regulatory Guide 1.146, August 1980)
16. ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel (Endorsed by Regulatory Guide 1.8, Revision 1-R)
- \* 17. Regulatory Guide 1.26, Revision 3, Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants
- \* 18. Regulatory Guide 1.29, Revision 3, Seismic Design Classification

- Notes:
- 1) When conflicts in similar requirements contained in Technical Specifications and the above documents exist, the requirements contained in Technical Specifications override those in the documents. Requirements in the documents will be considered when they supplement and are not in conflict with similar requirements in Technical Specifications.
  - 2) Revisions to the above listed documents will be considered for applicability to the Vermont Yankee Operational Quality Assurance Program upon written direction thereof by the Regional Administrator, Nuclear Regulatory Commission - Office of Inspection and Enforcement - Region I.
  - 3) Only those documents listed above shall be considered applicable to the Yankee and Vermont Yankee plants. Documents further referenced by the above listed

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

documents shall not be considered applicable. They may, however, be considered as guidelines.

\*Exceptions and alternatives to the provisions contained in this Standard/Guide are detailed in Appendix B.

- 4) This Program shall be applicable to those activities requiring quality assurance which occur commencing within 90 days after acceptance of the Program by the Nuclear Regulatory Commission.
- 5) The NRC shall be notified of changes, that reduce commitments in the accepted description of the QA program, for their review and acceptance prior to implementation. Acceptance will be assumed 60 days after submittal unless notified otherwise.
- 6) Changes that do not reduce QA program commitments shall be submitted to the NRC at least annually.
- 7) Editorial changes or personnel reassignments of a nonsubstantive nature do not require NRC notification.

D. MANAGEMENT EVALUATION

The Director of Operations ~~Cognizant-Corporate-Officer~~ directs a thorough evaluation of the established Operational Quality Assurance Program by assigning the Nuclear Safety Audit and Review Committee the task of reviewing for compliance with and evaluating the effectiveness of quality related activities.

Title: Section II, Quality Assurance Program

Page: 5 of 7

Rev.: 1 28

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

E. TRAINING

- ~~1. The Vice-President(s) and Manager of Operations are responsible for the indoctrination and training of their staffs involved with activities affecting quality during plant operation and/or license commitment.~~
12. The Training Manager at Vermont Yankee is responsible for the indoctrination and training of plant staff personnel performing activities affecting operations or requiring quality assurance, and of the operators who are formally licensed or qualified.
- ~~3. The Training Coordinator at the Yankee Site is responsible for indoctrination and training of site staff personnel performing activities affecting license requirements.~~
24. Within YNSD, Each Department Director/Manager is responsible for the indoctrination and training of department personnel performing activities affecting quality in applicable design and engineering, test, operational, construction, or quality phases.
35. The indoctrination and training programs shall provide the following:
- a. Instruction as to the purpose, scope, and implementation of quality-related manuals, instructions, and procedures.
  - b. Training and qualification in the principles and techniques of the activity being performed.
  - c. Documentation of the scope, objective, and method of implementing the program.
  - d. Maintenance of personnel proficiency by retraining, re-examining, and/or recertifying.

Title: Section II, Quality Assurance Program

Page: 6 of 7

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- e. Documentation of the training sessions including content, attendance, dates, and results where applicable.

Title: Section II. Quality Assurance Program

Page: 7 of 7

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

III. DESIGN CONTROL

A. SCOPE

This section of the Operational Quality Assurance Program establishes measures to assure that the design of and changes to structures, systems, and components covered by the Operational Quality Assurance Program are controlled.

B. RESPONSIBILITIES

1. The ~~Nuclear-Services-Division~~ Quality Assurance Department shall be responsible for auditing design documents and engineering specifications to verify that quality requirements, such as inspection requirements and acceptance criteria, have been included by the responsible parties.
2. The ~~Nuclear-Services-Division~~ Engineering/~~Project~~ Departments/~~Plants~~ shall be responsible for:
  - a. The ~~design-and~~ control of design activities (including design interfaces) for the change of structures, systems, or components including the requirement for independent review. (This NRC mandated review shall be performed by an uninvolved, but technically knowledgeable, person in the engineering discipline.)
  - b. Identification, documentation, and control of deviations from specified design requirements and/or quality standards.
  - c. Design analysis and delineation of acceptance criteria for inspections and tests.

Title: Section III, Design Control

Page: 1 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- d. Verification of the adequacy of a specific design feature by implementation of a prototype test when required.
  - e. Review of inspection and test data for compliance with established engineering criteria.
3. The Plant Operations Review Committee shall be responsible for:
- a. Review of all proposed plant changes and recommending their approval or disapproval to the Plant Superintendent/Manager.
  - b. Determination of whether proposed changes involve unreviewed safety questions.
4. The Plant Site Manager shall be responsible for:
- a. Review of the recommendations of the Plant Operations Review Committee.
  - b. Review and approval of proposed plant changes.
5. The Nuclear Safety Audit and Review Committee shall be responsible for the review of plant changes.
6. The Director of Operations ~~Vice-President(s) and Manager of Operations~~ and their staff shall be responsible for:
- a. Approval of procedures for processing plant design changes and engineering design changes.
  - b. Review, approval and distribution of plant change documents.
7. The Engineering Nuclear Services Division Plant Support Departments ~~Plant Support~~ shall be responsible for the distribution of

Title: Section III, Design Control

Page: 2 of 4

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

design change documents to the contractor performing the work where contract administration responsibilities have been assigned.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:

- a. Correct translation of applicable regulatory requirements and design bases into specifications, drawings and written documents.
- b. Application of suitable design controls to such activities as reactor physics; seismic, stress, thermal, hydraulic, radiation, and accident analyses; compatibility of materials; and accessibility for inservice inspection, maintenance and repair.
- c. Design reviews to assure that design characteristics can be controlled, inspected and tested.
- d. Performance of proper selection and accomplishment of design verification or checking process such as design reviews, alternate calculations, qualification testing or test programs. When a test program is used to verify the adequacy of a design, a qualification test of a prototype unit under the most adverse design conditions shall be used. The responsibilities and qualifications of the verifier, the areas and features to be verified, the pertinent considerations to be verified, and the extent of documentation are identified in procedures.

Procedures will provide the criteria that specify when verification should be by test. If the verification method is by test only, prototype,

Title: Section III, Design Control

Page: 3 of 4

Rev.: 1 28

~~YANKEE-ATOMIC-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

component, or feature testing is performed in accordance with written procedures prior to relying upon the component, system, or structure to perform its function.

- e. Subjection of design and specification changes, including those originating "on-site", to the same design controls and approvals that were applicable to the original design unless designated in writing to another responsible organization.
- f. Documentation of errors and deficiencies in the design process that adversely affect safety classified structures, systems, and components; performance of corrective action to preclude repetition.
- g. Review of standard "off-the-shelf" commercial or previously approved materials, parts, and equipment that are essential to the safety functions of structures, systems, and components, for suitability of application prior to selection.
- h. Selection of suitable materials, parts, equipment, and processes for safety classified structures, systems, and components.
- i. Establishment of procedures to assure that computer programs are verified and validated for a particular application.

Title: Section III, Design Control

Page: 4 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

IV. PROCUREMENT DOCUMENT CONTROL

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures necessary to assure that applicable regulatory requirements, design bases and other requirements which are necessary to assure adequate quality, are suitably included or referenced in the documents for procurement of material, equipment and services.

B. RESPONSIBILITIES

1. ~~The Nuclear-Services-Division Quality Assurance Department shall be responsible for auditing the review-of procurement process. requisitions-initiated-by-the-Plant-and-the-Yankee Nuclear-Services-Division, except-for-Vermont-Yankee-who may-request-such-reviews. The-Vermont-Yankee-staff-shall be-responsible-for-the-Procurement-Requisition-reviews.~~
2. The Plant or their corporate staffs shall be responsible for:
  - a. The preparation, review, issue, and control of purchase documents.
  - b. Preparation of detailed procedures as to how purchase documents are prepared, reviewed, approved, issued, and controlled.
  - c. Review of plant procurement requisitions (Vermont Yankee-plant-only).
3. ~~The Nuclear-Services-Division Engineering and/or-Project Departments shall be responsible for:~~

Title: Section IV, Procurement Document Control

Page: 1 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

a. Preparation of engineering specifications which detail the technical and quality requirements for material, equipment and services.

~~b. Initiation and/or review (Yankee plant only) of purchase documentation for material, equipment, and services required for plant changes.~~

4. The Plant Nuclear Services Division Plant Support Department shall be responsible for initiation and/or review (~~Yankee plant only~~) of purchase documentation for construction services including contractor supplied material and equipment required for plant changes where contract administration responsibilities have been assigned.

~~5. For YNSD, the Vice President(s) and Manager of Operations and their staff shall be responsible for the review and approval of procurement documents. For Vermont Yankee, this function is performed by the Vermont Yankee staff.~~

C. IMPLEMENTATION

1. Satisfaction of the criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:

a. Documentation of the review and approval of procurement documents prior to release and availability of this documentation for verification.

b. Identification of the vendor's applicable quality assurance requirements of 10CFR50, Appendix B and/or ANSI N18.7, and/or other applicable codes, standards or regulatory documents referenced in procurement documents which are to be reviewed by the qualified personnel knowledgeable in quality assurance. ~~For~~

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~Vermont-Yankee; this-function-will-be-the  
responsibility-of-the-Vermont-Yankee-staff.~~

- c. Identification in the procurement documents of the documentation to be prepared, maintained, and/or submitted to the purchaser prior to use, such as:
  - 1. Drawings, specifications, procedures;
  - 2. Inspection and fabrication plans;
  - 3. Inspection and test records;
  - 4. Personnel and procedure qualifications;
  - 5. Chemical and physical test results of material;  
and
  - 6. Quality Assurance Department's right of the access to the vendor's facilities and records for surveillance and/or audit to procurement documentation.
- d. Review and approval of changes and revisions to procurement documents at least equivalent to those for the original document.
- e. Control of procurement documents for spare and replacement parts at least equivalent to that used for the original equipment.

Title: Section IV, Procurement Document Control

Page: 3 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

V. INSTRUCTIONS, PROCEDURES, AND DRAWINGS

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for prescribing and accomplishing activities requiring quality assurance in accordance with approved drawings, instructions, or procedures.

B. RESPONSIBILITIES

~~Within Yankee Nuclear Services Division, Each~~ Department Director/Manager is responsible for establishing and complying with applicable procedures governing the activities affecting quality.

Persons preparing and approving documents are responsible for assuring that specifications, instructions, procedures, and drawings include appropriate quantitative or qualitative acceptance criteria for determining that activities have been satisfactorily accomplished; assuring that the applicable criteria of 10CFR50 Appendix B and/or ANSI N18.7 are specified; and assuring that the documents are kept current. In addition, the following departments have the distinct responsibilities delineated below.

1. ~~The Nuclear Services Division~~ Quality Assurance Department shall be responsible for preparation, review and approval of all ~~Plant~~ Quality Assurance Department procedures. The QA Department also reviews and approves selected plant prepared quality assurance procedures.
2. The Plant shall be responsible for the preparation, approval, maintenance, and implementation of all instructions and procedures associated with plant activities, including selected QA Procedures.

Title: Section V, Instructions, Procedures, and Drawings

Page: 1 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

3. The Nuclear-Services-Division Engineering and/or-Project Departments shall be responsible for:
  - a. Preparation and approval of engineering drawings and instructions, welding and nondestructive examination procedures, and procedures for Engineering Design Control.
  - b. Updating and control of original drawings and distribution of copies thereof.
4. The Plant Operations Review Committee shall be responsible for reviewing procedures affecting nuclear safety prior to their approval by the Plant Superintendent/Manager.
- ~~5. The Nuclear-Services-Division Plant-Support-Department shall be responsible for the preparation, approval, maintenance, and implementation of all instructions and procedures associated with Construction-Services activities.~~

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the Nuclear-Services-Division-and/or plant actions listed below:
  - a. Establishment of provisions which clearly delineate the sequence of actions to be accomplished in the preparation, review, approval, and control of instructions, procedures, and drawings.
  - b. Review of inspection plans; test, calibration, special process, maintenance and repair procedures; drawings and specifications; and changes thereto by the Quality Assurance Department or other personnel knowledgeable in quality assurance.

Title: Section V. Instructions, Procedures, and Drawings

Page: 2 of 2

Rev.: 1 28

~~YANKEE-ATOMIC-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VI. DOCUMENT CONTROL

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for controlling the issuance of documents, including revisions thereto, which affect quality activities.

B. RESPONSIBILITIES

1. All participating departments shall establish document control measures which provide for the following:

- a. Identification of organizations responsible for preparation, review, approval, and control of documents.
- b. Identification of documentation to be used in performing the activity.
- c. Coordination and control of interface documents.
- d. Establishment of distribution lists.
- e. Action to be taken for obsolete or superseded documents.

In addition, the following organizations have the unique responsibilities delineated below.

2. The Plant shall be responsible for:

- a. Controlling the issuance of plant operating, maintenance, repair, refueling, inspection and test, and change documents.

Title: Section VI, Document Control

Page: 1 of 4

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- b. Distribution and maintenance of all plant approved and/or revised documents assuring quality at the location where the activity is performed.
  - c. Review and distribution of drawings.
3. The Nuclear-Services-Division Engineering and/or Project Departments shall be responsible for:
- a. Controlling the maintenance and distribution issuance of engineering drawings, specifications, welding and nondestructive examination documents.
  - b. Revision and distribution of welding and nondestructive examination documents.
  - ~~c. Maintenance and distribution of engineering specifications and drawings.~~
4. The Vice President, (s) Engineering and Manager of Operations and their staff shall be responsible for:
- a. A system of review and approval of Plant drawings and specifications.
  - ~~b. Controlling the Nuclear-Services-Division Operational Support quality assurance documents.~~
5. The Executive-Director-of Quality Assurance Department shall be responsible for establishing the means for the preparation, control, and distribution of the VYNPC Operational Quality Assurance Manual Program and Approved Vendors List and revisions thereto.

Title: Section VI, Document Control

Page: 2 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear-Services-Division-and/or~~ plant actions listed below:

- a. Review and approval of document changes by the same organizations that performed the original review and approval or by other responsible organizations delegated by the controlling authority.
- b. Inclusion of approved changes in instructions, drawings, and other applicable documents prior to placing the system in operating status.
- c. Provision of availability of documents at the location where the activity is to be performed prior to commencing the work.
- d. Establishment, revision, and distribution of a master list or equivalent to identify the current revision number of instructions, specifications, drawings, procurement documents, or other quality assuring documents.
- e. Control of documents identified as follows:
  1. Design documents (i.e., Engineering/~~Plant~~ Design Change Requests, Specifications, Calculations, etc.);
  2. Design, manufacturing, construction, and installation drawings;
  3. Procurement documents;
  4. Operational Quality Assurance Program, maintenance, and operating procedures;

Title: Section VI, Document Control

Page: 3 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

5. Manufacturing, inspection and test instructions;
6. Test documents;
7. Design changes; and
8. Nonconformance reports.
9. Event reports (~~Vermont-Yankee~~).

f. Appendices to the Operational Quality Assurance Program are considered to be part of the Program and are reviewed and approved in accordance with the Program.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VII. CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

A. SCOPE

This section of the Operational Quality Assurance Program establishes measures to assure that purchased material, equipment and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents.

B. RESPONSIBILITIES

1. ~~The Nuclear Services Division~~ Quality Assurance Department shall be responsible for:
  - a. Audits and Commercial Surveys of vendor quality assurance programs.
  - b. Surveillances of vendor activities.
  - c. Maintenance of the ~~Yankee Atomic Electric Company~~ Approved Vendors List.
2. The ~~Nuclear Services Division~~ Quality Assurance and/or Engineering, ~~and/or Project~~ Departments shall be responsible for evaluating vendor manufacturing and technical capabilities upon request.
3. The Plant shall be responsible for:
  - a. Receipt inspection and control of material and equipment.
  - b. Evaluation of purchased services during and/or after completion of the service.
  - c. The Manager of Procurement Plant Services/ ~~Administrative Department at the Yankee plant and the Material Manager at Vermont Yankee~~ shall be

Title: Section VII, Control of Purchased Material, Equipment, and Services

Page: 1 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

responsible for the control of purchased material, parts and components until issued for installation or use.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:

a. Audits and Commercial Surveys of vendors based on one or more of the following, as appropriate to the scope of procurement activities:

1. When required in order to verify vendor capabilities to comply with the applicable criteria of 10CFR50, Appendix B, ANSI N18.7, or other quality program baselines.
2. When required based on the results of review and evaluation of vendor performance history.
3. When required in order to observe vendor facilities/service activities to assure conformance to purchase specifications.

b. Surveillances of vendors which provide for:

1. Specification of applicable quality controls, processes to be witnessed or verified, documentation required, and personnel responsible for performing the surveillance.
2. Verification that the vendor complies with the quality requirements specified in procurement documents by observation of in-process work.

~~YANKEE-ATOMIC-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- c. Transfer of the following records from the vendor to the plant:
  - 1. Documentation that identifies the purchased material/services and compliance with the applicable procurement document requirements.
  - 2. Documentation that identifies any deviation(s) from procurement requirements, including a description of those deviations dispositioned "accept as is" or "repair".
- d. Review and acceptance of vendor documentation by a responsible quality assurance individual.
- e. Receipt inspections of vendor furnished material/services, in accordance with predetermined instructions, to assure:
  - 1. Material is identified and conforms with receiving documentation.
  - 2. Material and documentation are determined acceptable prior to use.
  - 3. Inspection records or certificates of conformance attesting to material acceptability are on-site prior to use.
  - 4. Items are identified as to their inspection status prior to release for controlled storage, installation or further work.

Title: Section VII, Control of Purchased Material, Equipment, and Services

Page: 3 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- f. Evaluations of vendor effectiveness to control quality is performed at intervals consistent with the importance, complexity and quality of the item/services.

Title: Section VII, Control of Purchased Material, Equipment, and Services

Page: 4 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

VIII. IDENTIFICATION AND CONTROL OF MATERIAL, PARTS, AND COMPONENTS

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for identification and control necessary to prevent the use of incorrect or defective material, parts, and components.

B. RESPONSIBILITIES

1. The ~~Nuclear-Services-Division~~ Quality Assurance Department shall be responsible for review, evaluation, or verification (audit commercial survey or surveillance) of vendor quality controls and work processes for traceability of materials through the use of heat number, part number, or serial number, either on the item or on records traceable to the items.
2. The Plant shall be responsible for:
  - a. Preparation and approval of documents for the identification and control of materials, parts, components and storage of lubricants and other consumable materials.
  - b. Maintenance of traceability of materials, parts, and components received, stored, installed, and used at the Plant.
3. The ~~Nuclear-Services-Division~~ Engineering and/or ~~Project~~ Departments and/or ~~the Vermont-Yankee-staff~~ shall be responsible for assuring that engineering specifications contain appropriate requirements for the identification and control of materials, parts, and components.

Title: Section VIII, Identification and Control of  
Materials, Parts, and Components

Page: 1 of 2

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

4. The Manager of Procurement ~~For YNSD, the Vice-President(s) and Manager of Operations~~ and their staff shall be responsible for providing review and approval of documentation for the purchase of materials, parts, and components. ~~For Vermont Yankee, this function is performed by the Vermont Yankee staff.~~

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:
- a. Traceability of the identification of materials and parts to the appropriate documentation such as drawings, specifications, purchase orders, manufacturing and inspection documents, deviation reports, and Physical and Chemical Material Test Reports.
  - b. Identification of the item in a location and with a method which does not affect its fit, function or quality.
  - c. Documented verification of correct identification of materials, parts, and components prior to release for use.

Title: Section VIII, Identification and Control of  
Materials, Parts, and Components

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

IX. CONTROL OF SPECIAL PROCESSES

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures necessary to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel in accordance with applicable codes, standards, specifications, criteria and other special requirements.

B. RESPONSIBILITIES

1. The ~~Nuclear-Services-Division~~ Quality Assurance Department shall be responsible for:
  - a. Surveillance of certain nondestructive tests in accordance with "~~Yankee-Atomic-Electric-Company~~ Welding and Nondestructive Examination Procedures".
  - b. Review of special process documents, as requested, generated by the ~~Nuclear-Services-Division~~ Engineering/~~Project~~ Departments and vendors for use on-site and when otherwise specified.
2. The ~~Nuclear-Services-Division~~ Engineering and/~~or~~-~~Project~~ Departments shall be responsible for:
  - a. Preparation of documents for welding, heat treating, filler metal control, and nondestructive examinations.
  - b. Review and approval of special process documents provided by the vendor for use on-site and when otherwise specified.

Title: Section IX. Control of Special Processes

Page: 1 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

34. The Plant shall be responsible for:
- a. Assurance that maintenance and change work involving special processes are performed by qualified personnel in accordance with approved documents.
  - b. Control of material used in special processes by plant personnel.
  - 3. ~~c. The Plant Support Department shall be responsible for~~ c. Itraining, qualification, and requalification of personnel in nondestructive testing, such as liquid penetrant examination.
45. ~~The Manager of Procurement For YNSD, the Vice-President and Manager of Operation~~ and staff shall be responsible for review and approval of purchase documentation for special process material. ~~For Vermont Yankee, this function is performed by the Vermont Yankee staff.~~

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:
- a. Completion of qualification records of documents, equipment, and personnel connected with special processes in accordance with applicable codes, standards, and specifications.
  - b. Performance of special processes accomplished in accordance with written process sheets or equivalent with recorded evidence of verification.
  - c. Maintenance and updating of qualification records of special process documents, equipment, and personnel.

Title: Section IX, Control of Special Processes

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

X. INSPECTION

A. SCOPE

This section of the Operational Quality Assurance Program establishes measures for inspection of activities requiring quality assurance to verify conformance with approved procedures, drawings, specifications and instructions.

B. RESPONSIBILITIES

1. The Nuclear Services Division Quality Assurance Department shall be responsible for:

a. Auditing and Surveillance of Plant Inspection activities.

ba. Surveillance of documentation pertinent to the Inservice Inspection and Test Program-(for Vermont Yankee-only).

cb. Surveillance of vendor inspection activities and personnel.

~~e. Review of Installation and Test Procedures and Maintenance Requests to ascertain the extent of any required QA surveillances and QC inspections (Yankee Plant only).~~

~~d. Incorporation of mandatory notification/hold points for plant/vendor/service group activities into the QA surveillances and mandatory hold points for inspections (Yankee Plant only).~~

~~e. Writing, reviewing and approving quality control inspection checklists (Yankee Plant only).~~

Title: Section X. Inspection

Page: 1 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~f. Perform QC inspection activities to assure that predetermined requirements have been met. (Yankee Plant only.)~~

2. The Plant shall be responsible for:
  - a. Writing and approving inspection instructions and check lists.
  - b. Assuring that activities requiring quality assurance meet predetermined requirements.
  - c. Providing qualified personnel and necessary equipment for inspections to assure quality work.
  - d. Perform inspection activities to assure that predetermined requirements have been met.
  - e. Hold points incorporation where applicable.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:
  - a. Independence of personnel performing the inspection from the personnel performing the activity being inspected.
  - b. Use of instructions or check lists which incorporate the details listed in Section XVII Item C.1.a.
  - c. Use of necessary drawings and specifications when performing inspection operations.

Title: Section X. Inspection

Page: 2 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- d. Inspection of repairs and replacements in accordance with the approved design and inspection requirements or acceptable alternatives.
- e. Surveillance of processing methods, equipment, and personnel when direct inspection is not possible.
- f. Qualification of inspectors in accordance with applicable codes, standards, and company training programs; and maintenance of qualifications and certifications.
- g. Review of maintenance documents by qualified personnel knowledgeable in quality assurance to determine the need for inspection, identification of inspection personnel, and documenting inspection results.

Title: Section X. Inspection

Page: 3 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XI. TEST CONTROL

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for a test program to demonstrate that structures, systems, and components will perform satisfactorily in service.

B. RESPONSIBILITIES

1. The ~~Nuclear Services Division~~ Quality Assurance Department shall be responsible for:
  - a. Surveillance of vendor test program activities.
  - b. Surveillance of the documentation generated during the test program.
2. The ~~Nuclear Services Division~~ Engineering/Project Departments/Plants shall be responsible for:
  - a. Determination of when testing is required following plant changes.
  - b. Establishment of specifications, requirements, and acceptance criteria for testing following plant changes.
  - c. Development of test documents, performance of tests, and documentation, evaluation, and approval of test results.
  - d. Provision of qualified personnel and calibrated equipment for testing.
3. The Nuclear Safety Audit and Review Committee shall be responsible for reviewing proposed tests or experiments

Title: Section XI, Test Control

Page: 1 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

which involve an unreviewed safety question as defined in 10CFR50.59.

4. The Plant Operations Review Committee shall be responsible for the review of all test documents and test results for special tests.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:

- a. Assurance that changes, repairs, and replacements are tested in accordance with the approved design and testing requirements or acceptable alternatives.

- b. Review of written test documents for incorporation or reference of the following:

1. Requirements and acceptance limits contained in applicable design and procurement documents.

2. Instructions for performing the test.

3. Test prerequisites, such as:

- a) Calibrated instrumentation;

- b) Adequate and appropriate equipment;

- c) Trained, qualified, and licensed/certified personnel;

- d) Completeness of item to be tested;

- e) Suitable and controlled environmental conditions; and

Title: Section XI, Test Control

Page: 2 of 3

Rev.: 1 28



~~YANKEE-ATOMIC-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- f) Provisions for data collection and storage.
- 4. Mandatory inspection hold points for witness by owner, contractor or inspector, when applicable.
- 5. Acceptance and rejection criteria.
- 6. Method of documenting test data and results.
- c. Procedures shall provide for specification of test equipment with suitable accuracy. The criteria for determining the accuracy requirements of test equipment shall be provided when identification of specific equipment is not practical.

Title: Section XI, Test Control

Page: 3 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XII. CONTROL OF MEASURING AND TEST EQUIPMENT

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for the control, calibration and periodic adjustments of tools, gages, instruments, and other measuring and test devices used to verify conformance to established requirements.

B. RESPONSIBILITIES

1. The Each Plant Department shall be responsible for:

- a. Development of the implementing documents for control of measuring and test equipment including identification and calibration for equipment under their control.
- b. Provision of calibrated tools, gages and instruments necessary to perform required measurements and tests.
- c. Maintenance of calibration records.
- d. Preparation and review of specifications for measuring and test equipment, such that all applicable requirements are satisfied.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear-Sciences-Division-and/or plant~~ actions listed below:

- a. Identification and traceability of measuring and test equipment to the calibration test data.

Title: Section XII, Control of Measuring and Test Equipment

Page: 1 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- b. Labeling or tagging of measuring and test equipment to indicate due date for calibration.
- c. Calibration of measuring and test equipment at specified intervals based on required accuracy, purpose, degree of usage, stability characteristics, and other conditions affecting the measurement.
- d. Documentation of measures taken to determine the validity of previous inspections performed when measuring and test equipment is found to be out of calibration.
- e. Use of calibration standards having an uncertainty (error) requirement of no more than 1/4 of the tolerance of the equipment being calibrated. Calibration standards limited by the "state-of-the-art" may have a greater acceptable uncertainty.
- f. Documentation and maintenance of the status of all items under the calibration system.
- g. Traceability of reference and transfer standards to nationally recognized standards; or, documentation of the basis for calibration where national standards are nonexistent.

Title: Section XII, Control of Measuring and Test Equipment

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XIII. HANDLING, STORAGE AND SHIPPING

A. SCOPE

This section of the Operational Quality Assurance Program establishes measures to control the handling, storage, shipping, cleaning and preservation of material and equipment to prevent damage or deterioration.

B. RESPONSIBILITIES

1. The Plant shall be responsible for:
  - a. Development of the implementing documents for handling, storage and shipping of materials and equipment.
  - b. Provisions of suitable facilities and equipment for handling, storage, and shipping of materials.
  - c. Inspection and test of special handling tools and equipment.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear-Services-Division-and/or Plant~~ actions listed below:
  - a. Specification and accomplishment of special handling, preservation, storage, cleaning, packaging, and shipping requirements by qualified individuals in accordance with predetermined work and inspection instructions.
  - b. Preparation of instructions in accordance with design and specification requirements which control the cleaning, handling, storage, packaging, shipping and

Title: Section XIII, Handling, Storage, and Shipping

Page: 1 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

preservation of safety classified materials,  
components and systems to preclude damage, loss or  
deterioration by environmental conditions such as  
temperature or humidity.

Title: Section XIII, Handling, Storage, and Shipping

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XIV. INSPECTION, TEST AND OPERATING STATUS

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for indicating the status of items undergoing inspections and tests (via tags, labels, logs, data sheets, etc.), to prevent the unintentional bypass of required tests. In addition, this section establishes measures for indicating the operating status of components and systems to prevent their inadvertent operation.

B. RESPONSIBILITIES

1. The Plant shall be responsible for:
  - a. Ensuring indication of the status of operating equipment or systems to be removed from service for maintenance, test, inspection, repair or change.
  - b. Designation of personnel who are responsible for directing the status change of equipment and systems.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:
  - a. Notification of affected organizations for changes in the inspection, test and operating status of structures, systems, and components.
  - b. Procedural control of the bypassing of required inspections, tests and other critical operations with the concurrence of the Quality Assurance Department.

Title: Section XIV, Inspection, Test, and Operating Status

Page: 1 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- c. Procedural control of the application and removal of inspection and status indicators such as tags, markings, labels and stamps.

Title: Section XIV, Inspection, Test, and Operating Status

Page: 2 of 2

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XV. NONCONFORMING MATERIALS, PARTS, AND COMPONENTS

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures to control materials, parts, components, or any other activities which do not conform to requirements, in order to prevent their inadvertent use.

B. RESPONSIBILITIES

1. The Nuclear-Services-Division Quality Assurance Department shall be responsible for:

~~a. Review of nonconformance reports to determine repetitive nonconforming conditions and to verify resolution of significant conditions adverse to quality to preclude recurrence (for Yankee Plant only).~~

ab. Review of Event Reports to verify resolution of significant conditions adverse to quality (Vermont Yankee only).

be. Establishment of feedback system between plant Yankee Atomic-Electric-Company and vendor representatives in regard to nonconforming material or services.

cd. Initiation of ~~nonconformance reports (Yankee Plant and Event Reports for Vermont-Yankee)~~ when conditions are found which may adversely affect the quality of plant systems, structures, activities, or components.

2. The Nuclear-Services-Division Engineering and/or Plant ~~Project~~ Departments shall be responsible for:

a. Review of nonconforming services or items which cannot be corrected by vendor action.

Title: Section XV, Nonconforming Materials, Parts, and Components

Page: 1 of 3

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- b. Preparation or approval of implementing documents for repair and/or rework of nonconforming items.
3. The Director of Operations Vice-President(s) and their staff shall be responsible for the evaluation of significant plant-initiated nonconforming item, service, or activity dispositions.
4. The Plant shall be responsible for:
  - a. Writing implementation documents for the identification, documentation, and corrective action for services, material, installation, testing, operation, and/or surveillance nonconformances at the Plant.
  - b. Establishment of measures to provide for the documented control of nonconforming materials, parts, and components.
  - c. Establishment of feedback system between the plant and vendor representatives for the disposition of nonconforming services, materials, parts and components.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear Services Division and/or plant~~ actions listed below:
  - a. Identification, disposition, inspection and segregation of nonconforming items or activities.
  - b. Identification of those individuals or groups delegated the responsibility and authority for the disposition and written approval of nonconforming items or activities.

Title: Section XV, Nonconforming Materials, Parts, and Components

Page: 2 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- c. Inspection and test of reworked or repaired items which require reinspection and retest to original methods or methods equivalent thereto.
  - d. Inclusion of nonconformance reports dispositioned "accept as is" or "repair" as part of the inspection records furnished to the plant.
  - e. Periodic analysis of nonconformance reports to show quality trends with the results reported to management for review and assessment.
2. The identification, description, disposition, inspection and signature approval of the disposition for nonconformance shall be documented in a nonconformance report.

Title: Section XV, Nonconforming Materials, Parts, and Components

Page: 3 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XVI. CORRECTIVE ACTION

A. SCOPE

This section of the Operational Quality Assurance Program establishes measures to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment are promptly identified and corrected.

B. RESPONSIBILITIES

1. The ~~Nuclear Services Division~~ Quality Assurance Department shall be responsible for review and/or audit of recommendations to prevent recurrence of a significant condition adverse to quality.
2. The Director of Operations Vice-President(s) and their staff shall be responsible for:
  - a. Review of significant adverse conditions reported by the Plant including corrective actions taken.
  - ~~b. Coordination of comments between the Nuclear Services Division Projects Departments and the Plant (for Yankee Plant only).~~
3. The Plant shall be responsible for:
  - a. Identification of causes of conditions adverse to quality.
  - b. Implementation of the corrective action.
  - c. Documentation of corrective action taken.

Title: Section XVI, Corrective Action

Page: 1 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~d.-----Coordination of comments between the Nuclear Services  
Division Projects Departments and the Plant (for  
Vermont-Yankee-only).~~

4. The Nuclear-Services-Division Engineering and/or-Project Departments shall be responsible for:
  - a. Review of conditions adverse to quality which involve design deficiencies to determine the cause of the condition.
  - b. Recommendations of corrective action to preclude repetition of design deficiencies.
5. The Plant Operations Review Committee shall be responsible for:
  - a. Review of significant conditions adverse to quality and recommending corrective action.
  - b. Recommendations involving repetition of significant operating deficiencies.

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the Nuclear-Services-Division-and/or-plant actions listed below:
  - a. Initiation of corrective action following the determination of a condition adverse to quality to preclude recurrence.
  - b. Follow-up reviews to verify proper implementation of corrective actions and to close out the corrective action documentation.

Title: Section XVI. Corrective Action

Page: 2 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- c. Reporting of significant conditions adverse to quality, the cause of the conditions, and the corrective action implemented to the cognizant levels of management for review and assessment, both "off-site" and "on-site".

Title: Section XVI, Corrective Action

Page: 3 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XVII. QUALITY ASSURANCE RECORDS

A. SCOPE

1. This section of the Operational Quality Assurance Program establishes the measures for maintenance of records which provide documentary evidence of the quality of items and the activities affecting quality. Requirements shall be established for identification, transmittal, retrievability and retention of quality assurance records including duration, location, protection and assigned responsibility.
2. The quality assurance records shall include, but not be limited to, plant history; operating logs; principal maintenance; design change activities; reportable occurrences; nonconformance reports; results of reviews, inspections, tests, audits and material analyses; monitoring of work performance; qualification of personnel, documents and equipment; drawings; specifications; procurement documents; calibration documents and reports; and corrective action reports.

B. RESPONSIBILITIES

1. The ~~Nuclear Services Division~~ Quality Assurance Department shall be responsible for:
  - a. Maintenance of qualification/certification records for Quality Assurance Department personnel.
  - b. Maintenance of audit, surveillance and inspection records of quality assurance activities generated by the Quality Assurance Department personnel or their designates.
  - c. Preparation, control, and distribution of the Operational Quality Assurance Program and revisions thereto.

Title: Section XVII, Quality Assurance Records

Page: 1 of 3

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

2. The Plant shall be responsible for:
  - a. Writing implementation documents for the establishment and maintenance of Plant Operational Quality Assurance records.
  - b. Designating individuals and establishing requirements for the control of plant design, procurement, and operational records involving quality assurance.
  - c. Provision of facilities to prevent deterioration or loss of documentation.
  - d. Provision of a system for the review, approval and retention of plant prepared documents such as reportable occurrences, technical reports, required records and the meeting minutes of official committees.
3. The Nuclear-Services-Division Engineering and/or Plant Project Departments shall be responsible for establishing a system of review, approval and retention of documents relating to quality assurance for the operation of the departments.
- ~~4. The Executive Director of Quality Assurance shall be responsible for control and distribution of the Operational Quality Assurance Program and revisions thereto.~~

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of the ~~Nuclear-Services-Division-and/or plant~~ actions listed below:
  - a. Specifying the details required for inspections and test records including the following as applicable:
    - 1) Description of the type of observation.

Title: Section XVII, Quality Assurance Records

Page: 2 of 3

Rev.: 1 28

YANKEE-ATOMIG ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- 2) Evidence of completion and verification of manufacturing, inspection, or test operations.
  - 3) The date and results of the inspection or test.
  - 4) Information related to conditions adverse to quality.
  - 5) Inspector or data recorder identification.
  - 6) Evidence as to the acceptability of the results.
  - 7) Acceptance and rejection criteria.
  - 8) Identification of required procedures, drawings, and specifications and revisions.
  - 9) Specification of the necessary measuring and test equipment including accuracy requirements.
  - 10) Spent fuel storage records.
- b. Providing for record administration, receipt, storage, preservation, safekeeping, retrieval and final disposition.
- c. Construction, location and security of record storage facilities to prevent destruction of the records by fire, flooding, theft, and deterioration by environmental conditions such as temperature or humidity. Duplicate records shall be stored in a separate remote location when the type of document is not included in the record storage facility.

Title: Section XVII, Quality Assurance Records

Page: 3 of 3

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

XVIII. AUDITS

A. SCOPE

This section of the Operational Quality Assurance Program establishes the measures for a comprehensive system of planned and documented audits and in-plant surveillances to verify compliance with all aspects of the Program and to assess the effectiveness of the Program.

B. RESPONSIBILITIES

1. The ~~Nuclear-Services-Division~~ Quality Assurance Department shall be responsible for:
  - a. Providing objective evidence for audits/surveillances of activities encompassed by the 18 criteria of 10CFR50 Appendix B, and ANSI N18.7.
  - b. Training of audit and surveillance personnel.
  - c. Scheduling, coordinating, and implementing the formal In-Plant Audit/Surveillance Programs performed on activities covered in Sections III through XVII of this document.
  - d. Preparing information regarding the In-Plant Audit Program for review by the Nuclear Safety Audit and Review Committee.
  - e. Performing audits of vendors.
  - f. Following up of discrepancies discovered during audits/surveillance.
  - g. ~~Making recommendations to preclude possible audit/surveillance discrepancy repetition (for the Yankee Plant only).~~

Title: Section XVIII, Audits

Page: 1 of 4

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

gh. Performing periodic audits of all YNSD-Departments having responsibilities under the Quality Assurance Program.

2. The Director of Operations Vice-President(s) and Manager of Operations and their staff shall be responsible for:

a. Evaluate disposition of In-Plant Audits and prepares concurrence directives to the plant.

3. The Plant shall be responsible for:

~~a. Documentation of the plant position concerning any outstanding item resulting from an audit requiring a response (for the Yankee Plant only).~~

ab. Implementation of action to be taken as directed by the Vice-President and Manager Director of Operations.

be. Disposition of any outstanding items resulting from an audit (for Vermont Yankee only).

cd. Implementation of any corrective actions resultant from audit identified Event Reports (for Vermont Yankee only).

4. The Nuclear Safety Audit and Review Committee shall be responsible for:

a. Evaluation of the Operational Quality Assurance Program to determine its overall effectiveness.

b. Reporting results of Program reviews and recommendations resulting therefrom to the cognizant corporate officer.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

~~5. The Nuclear Services Division Departments shall be responsible for:~~

~~a. Documentation of the department position concerning any outstanding item resulting from an audit.~~

~~b. Implementation of action to be taken to correct deficiencies revealed by an audit.~~

C. IMPLEMENTATION

1. Satisfaction of this criterion shall be assured through the implementation of plant ~~and/or Nuclear Services Division~~ documents.

2. The implementing documents shall provide for the following:

a. Documentation of audit/surveillance results and review with management having responsibility in the area.

b. Necessary action to be taken by responsible management to correct deficiencies revealed by the audit/surveillance.

c. Re-audit of deficient areas until corrections have been accomplished to preclude recurrence of the deficiencies.

d. Inclusion of an objective evaluation of quality-related practices, procedures, instructions and the effectiveness of implementation in the audit.

e. Inclusion of an objective evaluation of work areas, activities, processes and items and the review of documentation in the audit.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

- f. Performance of audits in the below listed areas where the requirements of Appendix B to 10CFR Part 50 and ANSI N18.7 are being implemented:
- 1) Operation, maintenance and repairs.
  - 2) The preparation, review, approval, and control of designs, specifications, procurement documents, instructions, procedures, and drawings.
  - 3) Receiving and plant inspections.
  - 4) Indoctrination and training programs.
  - 5) Implementation of operating and test procedures.
  - 6) Calibration of measuring and test equipment.
- g. Scheduling of audits regularly on the basis of the status and safety importance of the activities being performed.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX A

Qualification Requirements for  
Management of Quality Assurance

Management of Quality Assurance must meet the below listed qualification requirements:

A. EDUCATION:

Bachelor's degree in Science or Engineering, or the equivalent in practical experience.

B. EXPERIENCE:

1. Four years experience in the field of Quality Assurance, or
2. Equivalent number of years of nuclear plant experience in a supervisory position preferably at an operating nuclear power plant or a combination of the two.
  - a) At least one year of this four years experience shall be nuclear power plant experience in the implementation of the Quality Assurance Program, and
  - b) Six months of the one year experience shall be obtained within a Quality Assurance organization.

Title: Appendix A. Qualifications Requirements

Page: 1 of 1

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B

Exceptions

The sub-categories of this Appendix summarize the exceptions noted in Section II of the Vermont Yankee ~~Yankee-Atomic-Electric-Company~~ Operational Quality Assurance Manual.

<u>Appendix B Sub-Category</u>	<u>Standard/Guide</u>	<u>Title</u>
I.	ANSI N45.2.3-1973	Housekeeping During the Construction Phase of Nuclear Power Plants
II.	ANSI N45.2.9-1974	Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants
III.	ANSI N45.2.10-1973	Quality Assurance Terms and Definitions
IV.	R.G. 1.64, Rev. 2	Quality Assurance Requirements for the Design of Nuclear Power Plants
V.	ANSI N45.2.2-1972	Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants
VI.	ANSI N45.2.6-1978	Qualification of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants
VII.	R.G. 1.26, Rev. 3	Quality Group Classifications and Standards for Water-, Steam- and Radioactive-Waste-Containing Components of Nuclear Power Plants
VIII.	R.G. 1.29, Rev. 3	Seismic Design Classification

Title: Appendix B, Exceptions

Page: 1 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

<u>Appendix B Sub-Category</u>	<u>Standard/Guide</u>	<u>Title</u>
IX.	ANSI N18.7-1976	Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
X.	R.G. 1.33, Rev. 2	Quality Assurance Program Requirements (Operations)

Title: Appendix B. Exceptions

Page: 2 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

I. ANSI N45.2.3 - 1973, Housekeeping During the Construction Phase of Nuclear Power Plants

A. EXCEPTION:

Subsection 2.1 - Planning

The Yankee and Vermont Yankee plants takes exception to the five-zone requirements specified in the subject standard.

ALTERNATIVE:

The Yankee and Vermont Yankee plants shall establish as a minimum a three zone program as follows:

Zone III

Zone III criteria shall be applied to major portions of the reactor coolant system which are opened for inspection, maintenance or repair.

1. Access control over personnel shall be required.
2. Cleanliness shall be maintained, commensurate with the work being performed, so as to preclude the entry of foreign material to the Reactor Coolant System.
3. A documented cleanliness inspection shall be performed immediately prior to closure.

Note: The Zone III requirements may be expanded for certain maintenance repair activities if deemed appropriate by plant management. In such instances applicable sections of Zones I & II shall be specified.

Title: Appendix B, Exceptions

Page: 3 of 26

Rev.: 1 28



~~YANKEE-ATOMIC-ELECTRIC-COMPANY~~  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Zone IV

Zone IV criteria shall be applied to the radiation control areas of the plant.

1. Standard janitorial and work practices shall be utilized to maintain a level of cleanliness commensurate with company policy in the areas of Housekeeping, Plant and Personnel Safety and Fire Protection.
2. Additional housekeeping requirements shall be implemented as required for the control of radioactive contamination.
3. Smoking and eating shall be controlled consistent with good health physics practices and to maintain cleanliness.

Zone V

Zone V criteria shall be applied to the remainder of the plant.

1. Standard janitorial and work practices shall be utilized to maintain a level of cleanliness commensurate with company policy in the areas of Housekeeping, Plant and Personnel Safety and Fire Protection.

B. EXCEPTION:

Subsection 3.2 - Control of Facilities

The ~~Yankee and Vermont Yankee plants~~ takes exception to the control of tools, equipment, materials and supplies used in Zone III.

ALTERNATIVE:

Title: Appendix B, Exceptions

Page: 4 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

The ~~Yankee~~ and Vermont Yankee plants shall verify control for Zone III as indicated in Exception A of this sub-category.

Title: Appendix B. Exceptions

Page: 5 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

II. ANSI N45.2.9 - 1974, Requirements for Collection, Storage, and Maintenance of Quality Assurance Records for Nuclear Power Plants

A. EXCEPTION:

Subsection 5.6(3) Facility

The Yankee and Vermont Yankee plants takes exception to "structures, doors, frames, and hardware should be Class A fire rated with a recommended four hour minimum rating."

ALTERNATIVE:

"Doors, structures, frames, and hardware shall be designed to comply with the requirements of a minimum two (2) hour fire rating, meeting NFPA No. 232 guidelines."

JUSTIFICATION:

The two (2) hour rating has been endorsed by the NRC Standard Review Plan NUREG-0800, Revision 2, dated July 1981.

Title: Appendix B, Exceptions

Page: 6 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

III. ANSI N45.2.10 - 1973. Quality Assurance Terms and Definitions

A. EXCEPTION:

Subsection 2 - Terms and Definitions

The ~~Yankee and~~ Vermont Yankee plants takes exception to the definitions of "Certificate of Conformance" and "Certificate of Compliance".

ALTERNATIVE:

The ~~Yankee and~~ Vermont Yankee plants shall reverse the definitions of the above terms so our Program will be in compliance with the implied definitions in the ASME B&PV Code and Yankee specifications.

Title: Appendix B. Exceptions

Page: 7 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

IV. Regulatory Guide 1.64, Revision 2, "Quality Assurance Requirements for the Design of Nuclear Power Plants"

A. EXCEPTION:

Subsection c.2

The Yankee and Vermont Yankee plants take exception to the regulatory guide position on the exclusion of supervisors performing design verification.

ALTERNATIVE:

The Yankee and Vermont Yankee plants will continue the accepted practices for independent design verification in accordance with the provisions of ANSI N45.2.11-1974, Section 6.1.

JUSTIFICATION:

The exclusion of line supervision to perform design verification has proven to be an unnecessary burden on the resources within the engineering organizations of the company, and counterproductive during heightened periods of engineering activities. ANSI N45.2.11 contains specific limitations on the situations in which a supervisor is permitted to perform design verification. The standard states, "This verification may be performed by the originator's supervisor provided the supervisor did not specify a singular design approach, or rule out certain design considerations and did not establish the design inputs used in the design, or if the supervisor is the only individual in the organization competent to perform the verification." This control was developed through realistic evaluation of the practicable limits that restrictions impose on engineering organizations by the working group that developed ANSI N45.2.11.

Title: Appendix B, Exceptions

Page: 8 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

V. ANSI N45.2.2 - 1972. Packaging, Shipping, Receiving, Storage & Handling of Items for Nuclear Power Plants

A. EXCEPTION:

Subsection 3.7.1 & A3.7.1 - Containers

The ~~Yankee and~~ Vermont Yankee plants takes exception to the specific requirements for containers.

ALTERNATIVE:

Containers shall be of suitable construction to assure material is received undamaged.

JUSTIFICATION:

Containers shipped by closed carrier, stored inside and not subjected to a wet environment do not require weather resistant fiberboard, therefore, this is an unnecessary expense. Additionally, numerous vendors utilize shipping containers that do not comply with the specific requirements of this section, i.e., flaps overlap. The acceptance criteria for a shipping container should be established based on the capability of the container to maintain the component material in a safe condition. Technology has advanced beyond the standard.

B. EXCEPTION:

Subsection 3.7.2 - Crates and Skids

The ~~Yankee and~~ Vermont Yankee plants takes exception to the requirement that skids and runners shall be used on boxes with a gross weight of 100 pounds or more.

Title: Appendix B. Exceptions

Page: 9 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

ALTERNATIVE:

Skids or runners shall be used on boxes with a gross weight of 100 pounds or more if practical.

JUSTIFICATION:

Storage methods and container design frequently are such that runners or skids are not feasible.

C. EXCEPTION:

Subsection 5.2.1 - Shipping Damage Inspection

The ~~Yankee~~ and Vermont Yankee plants takes exception to the requirement that a preliminary visual inspection or examination be performed prior to unloading.

ALTERNATIVE:

The ~~Yankee~~ and Vermont Yankee plants shall perform those required inspections after unloading. In special instances, preunloading inspections shall be performed.

JUSTIFICATION:

Post unloading inspection is adequate to determine any damage that may have been incurred during shipping and handling.

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

D. EXCEPTION:

Subsection 5.2.2 - Item Inspection

The ~~Yankee~~ and Vermont Yankee plants takes exception to the requirement, that "The inspections shall be performed in an area equivalent to the level of storage requirements for the item."

ALTERNATIVE:

The ~~Yankee~~ and Vermont Yankee plants shall perform receiving inspection in a manner and in an environment which do not endanger the requisite quality of the item; however, receiving area environmental controls may be less stringent than storage environmental controls for that item. When inspections are performed in receiving areas with environmental controls less stringent than storage area environmental controls, a time limit shall be established on a case basis for retention of items in the receiving area. Retention time shall be such that deterioration is prevented and applicable manufacturer recommendations are addressed.

JUSTIFICATION:

Receipt inspection activities are for a much shorter duration and therefore should not be subjected to the same stringent requirements as required for storage.

E. EXCEPTION:

Subsection 5.2.3 - Special Inspection

The ~~Yankee~~ and Vermont Yankee plants takes exception to attaching special inspection procedures to the item or container.

Title: Appendix B. Exceptions

Page: 11 of 26

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

ALTERNATIVE:

Special inspection procedures shall be readily available to personnel performing inspections.

JUSTIFICATION:

Procedures are subject to less abuse and more stringent controls when maintained on file and not attached to the item. Inspection status is maintained by tagging and procedure control.

F. EXCEPTION:

Subsection 6.1.2 - Levels of Storage

The ~~Yankee and~~ Vermont Yankee plants takes exception to two specific requirements associated with fuel storage (classified Level A).

ALTERNATIVE:

The ~~Yankee and~~ Vermont Yankee plants shall meet the requirements of Level A storage for new fuel with the exception of special air filtering; and temperature and humidity controls.

JUSTIFICATION:

The existing storage conditions at the Vermont Yankee operating plants are consistent with the protection provided to the fuel while in storage at the manufacturer (vendor) and/or while in transit to the plant site and are judged to provide adequate protection to the fuel assembly structure which is of highly corrosion resistant materials. We believe that the above listed requirements are intended for application at the manufacturing

Title: Appendix B, Exceptions

Page: 12 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

facility (vendor) where the uranium pellets may be exposed to the atmosphere and not in its fully encapsulated, and therefore, fully protected form in a completed fuel assembly.

G. EXCEPTION:

Appendix A-3 Subsection A3.5.1(1) - Caps & Plugs

The ~~Yankee~~ and Vermont Yankee plants takes exception to the requirement that nonmetallic plugs and caps shall be brightly colored.

ALTERNATIVE:

Nonmetallic plugs and caps shall be of a contrasting color.

JUSTIFICATION:

The purpose of utilizing brightly colored plugs and caps is to assist in assuring obstructions are not inadvertently placed in operating components or systems. By using plugs and caps of a contrasting color this objective can be achieved.

H. EXCEPTION:

Appendix A-3 Subsection A3.9(1) - Second Group, Markings

The ~~Yankee~~ and Vermont Yankee plants takes exception to the requirement that container markings shall appear on a minimum of two sides.

ALTERNATIVE:

Title: Appendix B, Exceptions

Page: 13 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Containers shall be adequately marked to provide identification and retrievability.

JUSTIFICATION:

Containers are tagged to provide identification and inspection status. Employment of two tags on small containers adds bulk and confusion and does not provide for better identification or traceability.

I. EXCEPTION:

Appendix A-3, Subsection A.3.9(4) - Second Group, Marking

The Yankee and Vermont Yankee plants takes exception to the requirement that container markings shall be no less than 3/4" high, container permitting.

ALTERNATIVE:

Container markings shall be of a size which permits easy recognition.

JUSTIFICATION:

Markings were intended to provide identification and instructions. The criteria should be that the markings clearly provide the same.

J. EXCEPTION:

Appendix A-3 Subsection A.3.9(6) - Second Group, Marking

The Yankee and Vermont Yankee plants takes exception to the information required for container marking.

Title: Appendix B, Exceptions

Page: 14 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

ALTERNATIVE:

Marking shall be adequate in each case to provide identification, traceability and instructions for special handling, as applicable.

JUSTIFICATION:

The information required is excessive. Cluttering a container with excessive markings only reduces the main objectives, maintaining identification and establishing special controls.

Title: Appendix B. Exceptions

Page: 15 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

VI. ANSI N45.2.6 - 1978. Qualification of Inspection, Examination and Testing Personnel for Nuclear Power Plants

A. EXCEPTION:

The ~~Yankee~~ and Vermont Yankee plants takes exception to the application of the Standard to all ~~Yankee~~ and Vermont Yankee personnel performing inspection, examination and testing.

ALTERNATIVE:

~~Yankee~~ and Vermont Yankee personnel identified in ANSI N18.1-1971 who perform inspection, examination and testing will be qualified to ANSI N18.1-1971.

~~Yankee~~ and Vermont Yankee personnel not identified in ANSI N18.1-1971 who perform inspection, examination and testing will be qualified to ANSI N45.2.6-1978.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

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

A. EXCEPTION:

The Yankee and Vermont Yankee plants take exception to the Regulatory Guide in its entirety.

ALTERNATIVES:

Yankee

~~Yankee shall continue to classify structures, components and systems in accordance with ANSI Standard N18-2, January 1973, "Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants", as in the past.~~

Vermont Yankee

Vermont Yankee shall continue to classify structures, components and systems in accordance with ANS-22, Draft No. 4, Rev. 1, May 1973, "Nuclear Safety Criteria for the Design of Stationary Boiling Water Reactor Plants," as in the past.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

VIII. Regulatory Guide 1.29, Rev. 3, (9/78), Seismic Design Classification

A. EXCEPTION:

The Yankee and Vermont Yankee plants takes exception to the application of Regulatory Guide 1.29, Rev. 3, (9/78).

ALTERNATIVES:

Yankee

~~Yankee shall apply Regulatory Guide 1.29, Rev. 3, (9/78), to those structures, systems and components as determined by the USNRC System Evaluation Program.~~

Vermont Yankee

The seismic design classification of structures, systems, and components at Vermont Yankee shall be as defined in the Vermont Yankee FSAR.

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

IX. ANSI N18 .7-1976. Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

A. EXCEPTION

Subsection 4.5 - Audit Program

The ~~Yankee and the~~ Vermont Yankee Plants takes exception to the requirement that audits of all safety-related functions shall be completed within a period of two (2) years.

Alternative:

Audits of selected aspects of operational phase activities shall be performed with a frequency commensurate with their safety significance and in such a manner as to assure that an audit of all safety-related functions is completed at least once within a three (3) year period, ~~of no less than three (3) years,~~ based upon the results of an annual Functional Area Assessment.

The Annual Functional Area Assessment is a documented analysis of functional areas important to safety. The purpose is 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 QA Audits and Surveillance, NRC Inspections, Event Reports, Nonconformance Reports, Corrective Action Reports, and Self-Assessments. Other indicators such as Personnel Changes, change/increase in functional area responsibilities, Industry Findings, and INPO evaluations will also be considered. Each area will be assigned a rating with a comparison to previous years.

Title: Appendix B, Exceptions

Page: 19 of 26

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

This assessment will be reviewed and approved by QA and Plant Management. This document is considered a QA record and will be available for NRC review.

Justification:

To utilize quality oversight resources more effectively, senior management desires the flexibility to direct resources to areas which have perceived weaknesses. The two-year audit cycle has not ensured that the frequency, scope and associated resources are based on the risk associated with the audit area.

Yankee and Vermont Yankee proposes to adjust the audit schedule based on empirical data and performance history to complete audits of safety-related functions within a period of three years. This modification meets the intent of published regulatory requirements involving activities important to safety.

B. EXCEPTION:

Subsection 5.2.15 - Review, Approval and Control of Procedures

~~Yankee-Atomic-Electric-Company-and-the-Vermont~~ Yankee Operating Plant takes exception to the following paragraph:

"Plant procedures shall be reviewed 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".

Title: Appendix B. Exceptions

Page: 20 of 26

Rev.: 1 20

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Alternative:

Plant procedures will be periodically reviewed in accordance with administrative controls. These controls will establish a schedule for these periodic reviews. All applicable plant procedures will be reviewed following an unusual incident, unexpected transient, operator error, or equipment failure (malfunction), and following a modification to a system.

Nonroutine procedures such as Emergency Operating Procedures, Emergency Plan Implementing Procedures, or other procedures whose use may be event driven, will be reviewed every two years.

However, if a nonroutine procedure is fully exercised and there is a detailed scrutiny of the entire procedure as part of a documented training program, this may serve as the biennial review of the procedure used.

At least every two years, the Quality Assurance (or other independent) organization shall audit a representative sample of routine plant procedures that are used more frequently than every two years. The audit is to ensure the acceptability of the procedures and verify that the procedure review and revision program is being implemented effectively. The root cause of significant deficiencies is to be determined and corrected.

Routine plant procedures that have not been used for two years will be reviewed before use to determine if changes are necessary or desirable.

Title: Appendix B, Exceptions

Page: 21 of 26

Rev.: 1 28

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Justification:

The current requirement to review each safety-related procedure on a biennial cycle results in the expenditure of significant technical and administrative resources. Programmatic controls and practices are in place to provide adequate reviews, including the following:

- The plant modification processes require that procedures affected by the modification be identified during the design change preparation, and revised prior to closure of the modification package.
- The Operating Experience Program involves the review of USNRC, INPO, and vendor supplied information for applicability and determination of further action. This review includes an evaluation of applicable documents such as procedures and the initiation of required changes.
- Administrative controls currently exist requiring that if a procedure cannot be performed as written, a procedure change must be completed prior to continuation of the procedure.
- Temporary changes are occasionally generated during, or prior to procedure use. Current administrative controls require that those changes that are permanent shall be incorporated into the procedure via the procedure revision process.
- As part of the audit and surveillance process, procedures are evaluated as to adequacy, ease of use, proper technical content, and compliance with applicable plans and programs.

Title: Appendix B, Exceptions

Page: 22 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

- The corrective action process (Event Reports) requires that a root cause analysis be performed for events, violations and nonconforming conditions. Where identified as contributing factors, procedure changes are initiated.
- Changes to Technical Specifications and the FSAR are reviewed for potential impact on, and initiation of changes to plant procedures.
- Plant procedures are approved by appropriate personnel prior to initial use. Current administrative controls also require pre-job briefings for procedures identified as infrequent.

This modification meets the intent of published regulatory requirements involving activities important to safety.

C. EXCEPTION:-(Vermont-Yankee-Plant-only)

Subsection 5.3.9

The Vermont Yankee ~~Operating Plant~~ takes exception to the requirements that detail Emergency Procedures be in accordance with Paragraph 5.3.9.

Alternative:

Vermont Yankee Emergency Operating Procedures are written in accordance with the Symptom/Function-Based Guidelines developed by the BWR Owners Group and accepted by the NRC. These Symptom/Function Based Procedures, mandated by the NRC in NUREG-0737, have format and content different from the Event-Oriented Emergency Procedures described in ANSI N18.7-1976.

Title: Appendix B. Exceptions

Page: 23 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Justification:

NUREG 0737 supersedes ANSI N18.7-1976 in the area of Emergency Operating Procedures. Changes to procedure format are required in order to develop Symptom/Function-Based Procedures.

Title: Appendix B, Exceptions

Page: 24 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

X. Regulatory Guide 1.33, Revision 2, Quality Assurance Requirements  
(Operational)

A. EXCEPTION:

Subsection 4.5 - Audit Program

The ~~Yankee and the~~ Vermont Yankee Plants takes exception to the following:

- Section 4.5 states that "all audits of safety related functions are completed within a two (2) year period".
- Paragraph 4.a. "The results of actions taken to correct deficiencies that affect nuclear safety and occur in facility equipment, structures, systems, or method of operations - shall be audited at least once per 6 months".
- Paragraph 4.b. "The conformance of facility operation to provisions contained within the technical specifications and applicable license conditions - shall be audited at least once per 12 months."
- Paragraph 4.c. "The performance, training, and qualifications of the facility staff - shall be audited at least once per 12 months."

Alternative:

Audits of selected aspects of the functional areas listed above, shall be performed within a frequency commensurate with their safety significance and will be completed at least once within a three (3) year period, ~~of no less than three (3) years~~, based upon the results of an annual functional area assessment.

Title: Appendix B, Exceptions

Page: 25 of 26

Rev.: 1 28

YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX B  
(continued)

Justification:

To utilize quality oversight resources more effectively, senior management desires the flexibility to direct resources to areas which have perceived weaknesses. The two-year audit cycle has not ensured that the frequency, scope and associated resources are based on the risk associated with the audit area.

Yankee and Vermont Yankee proposes to adjust the audit schedule based on empirical data and performance history to complete audits of safety-related functions within a period of three years. This modification meets the intent of published regulatory requirements involving activities important to safety.

Title: Appendix B. Exceptions

Page: 26 of 26

Rev.: 1 28

YANKEE-ATOMIG-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX C

Vermont Yankee  
Classification of Structures, Components, and Systems

NOTE: A comprehensive listing is in the Vermont Yankee Safety Classification Manual.

Title: Appendix C, Vermont Yankee Classification

Page: 1 of 1

Rev.: 1 28



YANKEE-ATOMIC-ELECTRIC-COMPANY  
VERMONT YANKEE NUCLEAR POWER CORPORATION

APPENDIX-D

-Yankee  
-Classification-of-Structures,-Components,-and-Systems

NOTE:-A-comprehensive-listing-is-in-the-Yankee-Safety-Classification  
-----of-Systems-Manual-

Title:-Appendix-D,-Yankee-Classification

Page:-1-of-1

Rev:-1-28