Maine Yankee Atomic Power Company

Quality Assurance Program

For

Maine Yankee ISFSI

Revision 30

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QUALITY ASSURANCE PROGRAM FOR MAINE YANKEE

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QUALITY ASSURANCE PROGRAM FOR MAINE YANKEE

A. MANAGEMENT

1. Methodology

a. The Quality Assurance Program (QAP) previously known as Maine Yankee Quality Assurance Program (MYQAP) provides a consolidated overview of the quality program controls that govern the operation and maintenance of the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI). The QAP describes the quality assurance organizational structure, functional responsibilities, levels of authority and interfaces.

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

c. The QAP applies to all activities associated with structures, systems, and components (SSCs) which are Important to Safety (10 CFR 72). The QAP also applies to transportation packages licensed by the NRC under 10 CFR 71. Requirements of the QAP are done in a graded approach commensurate with an item or activities importance to safety. This graded approach is responsive to NRC Regulatory Guide 7.10. The applicability of the requirements of the QAP to other items and activities is determined on a case-by-case basis. The QAP satisfies the requirements of 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G.

d. The QAP is implemented through the use of approved procedures (i.e., policies, directives, procedures, manuals, instructions, or other documents) which provide written guidance for the control of Important to Safety items and activities and provides for the development of documentation to demonstrate objective evidence of compliance with stated requirements.

2. Organization

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

a. The President reports to the Board of Directors and has overall responsibility for the QAP and operation of the Maine Yankee ISFSI. The President resolves all disputes related to the implementation of the QAP for which resolution is not achieved at the appropriate organizational levels within Maine Yankee.

b. The individuals fulfilling the following management functions report to the President. These individuals may report through an additional layer of management, but shall maintain sufficient authority and organizational freedom to implement the assigned responsibilities. These individuals may fulfill more than one function described below unless prevented by the need to maintain independence as required elsewhere in the QAP.

1. ISFSI Manager – Reports to the President and is responsible for the direction and administration of ISFSI Operations, Site Training, Security and Emergency Planning. The Independent Review Function (ISR), described in Section D, reports to the ISFSI Manager.

2. ISFSI Programs Manager – Reports to the President and is responsible for ISFSI Programs as assigned by the President. The ISFSI Programs Manager is responsible for the Radiation Protection Program and ISFSI QA.

3. ISFSI QA – Reports to the President and is responsible for the audit/survey and surveillance functions described in the QAP. The ISFSI QA is designated by and has a direct line of communication with the President.

3. Responsibility

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

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

c. The Independent Management Assessments are periodically performed to monitor overall performance and confirm that activities affecting quality comply with the QAP and that the QAP is effectively implemented. This Independent Management Assessment is performed by individual(s) designated by the President, independent of activities assessed and who provide the appropriate level of expertise in the activities assessed. The Independent Management Assessment results are communicated in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action. In addition, these results are reported in a timely fashion to the President of Maine Yankee.

d. Maine Yankee is responsible for ensuring that the applicable portion(s) of the Quality Assurance Program is properly documented, approved, and implemented (staff is trained, necessary materials and approved procedures are available) before an activity within the

scope of the QAP is undertaken by Maine Yankee or by others who have been delegated the responsibility. As such, implementing controls and procedures for some elements of the QAP are not needed under normal ISFSI operations and will only be developed if and when a need is identified.

e. Individual managers are responsible for ensuring that personnel working under their cognizance are provided with the necessary training and resources to accomplish assigned tasks that fall within the scope of the QAP.

f. Approval of QAP implementing procedures will be by the management responsible for the function. These procedures shall reflect the requirements of the QAP and work is required to be accomplished in accordance with them.

4. Authority

a. When Maine Yankee delegates responsibility for planning, establishing, or implementing any part of the QAP, sufficient authority to accomplish the assigned responsibilities is also delegated.

b. The ISFSI QA provides management with objective evidence of the performance of activities affecting quality, independent of the individual or group directly responsible for performing the specific activity. This individual(s) has the authority and organizational freedom to verify activities affecting quality and is independent of undue influences and responsibilities for schedules and costs. The ISFSI QA has the responsibility and authority to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming materials. The individual(s) also has the responsibility and authority to identify quality problems, to recommend or provide solutions, and to verify their implementation.

5. Personnel Training and Qualification

a. Each member of the facility staff (including audit/survey, surveillance and inspection personnel) shall have sufficient qualifications to perform their assigned duties. Implementing procedures provide the guidance used for determining and assessing appropriate staff qualifications.

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

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

d. In addition to the above, the following specific qualification requirements are required:

1. The position of the ISFSI QA shall meet the following minimum qualifications:

a. Graduate of a four-year accredited engineering or science college or university, or the equivalent in practical experience plus five (5)

or more years in positions of leadership, such as lead engineer, project engineer, audit team leader, etc.

b. At least two years of this experience should be associated with nuclear quality assurance activities, and at least one year of this experience shall be in a quality assurance organization. An additional two years of quality assurance program implementation may be substituted for the one-year experience within a quality assurance organization.

c. A master's degree in engineering or business management is considered equivalent to two years of experience.

2. The position of Radiation Protection Manager shall meet the following minimum qualifications:

a. Academic degree in an engineering/science field or equivalent as provided for in paragraph c, below.

b. Minimum of five years professional experience in the area of radiological safety, three years of which shall be in applied radiation work in a nuclear facility.

c. Technical experience in the area of radiological safety beyond the five year minimum may be substituted on a one-for-one basis towards the academic degree requirement (four years of technical experience being equivalent to a four year academic degree).

d. Academic and technical experience must total a minimum of nine years.

3. The position of Independent Safety Reviewer (ISR), shall meet the following minimum qualifications:

a. Knowledgeable of the regulatory requirements and operational aspect of an ISFSI.

b. At least 5 years of professional experience and either a Bachelor's Degree in Engineering or the Physical Sciences or shall have equivalent qualifications.

c. Knowledge in the subject areas requiring review.

The ISFSI Manager shall evaluate potential reviewers' qualifications and document the appointment of a reviewer(s) based on their qualifications.

6. Corrective Action

a. Each individual working at Maine Yankee is responsible for promptly identifying and reporting conditions adverse to quality. Management at all levels encourages

the identification of conditions that are adverse to quality.

b. The corrective action program will ensure the prompt identification, documentation, and correction of conditions adverse to quality. Significant conditions adverse to quality shall require cause determination and a corrective action plan that should prevent or lessen the likelihood of recurrence.

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

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

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

7. Regulatory Commitments

Except when alternatives or exceptions are identified, the implementing procedures for the QAP shall comply with the quality assurance guidance documents listed in Appendix B. Additionally; the following clarifications apply to all guidance documents listed in Appendix B:

a. If the guidance in any of the listed documents is in conflict with the QAP, the guidance provided in the QAP is the controlling document.

b. Standards, guides, codes, etc., identified in any commitment document are not quality assurance program requirements unless that document is also listed in the Appendix.

b. Guidance applicable to safety related items and activities (10 CFR 50) are applicable to comparable items and activities (Important to Safety) required by 10 CFR 71 and 10 CFR 72.

B. PERFORMANCE/VERIFICATION

1. Methodology

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

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

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

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

2. Design Control

a. The program will ensure that the activities associated with the design of structures, systems and components and modifications thereto, are executed in a planned, controlled, and orderly manner.

b. The program utilizes the guidance of NUREG/CR-6407 to classify structures, systems and components such that appropriate quality requirements are identified and documented on drawings, component lists, or procurement documents, as applicable.

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

d. Design inputs (e.g., performance, conditions of the facility license, quality, and quality verification requirements) shall be correctly translated into design outputs (e.g., specifications, drawings, procedures, and instructions).

e. The final design output shall relate to the design input in sufficient detail to permit verification.

f. The design process shall ensure that materials, parts, equipment and processes are selected and independently verified consistent with their importance to safety to ensure they are suitable for their intended application.

g. Changes to final designs (including field changes and modifications) and dispositions of non-conforming items to either use-as-is or repair shall be subjected to design control measures commensurate with those applied to the original design and approved by the organization that performed the original design or a qualified designee. The original design organizations for the Maine Yankee ISFSI are identified in Appendix A.

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

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

3. Design Verification

a. The program will verify the acceptability of design activities and documents for the design of items. The selection and incorporation of design inputs and processes, outputs and changes are verified.

b. Verification methods include, but are not limited to, design reviews, alternative calculations, and qualification testing. The extent of this verification will be a function of the importance to safety of the item, the complexity of the design, the degree of standardization, the state of the art, and the similarity with previously proven designs. Standardized or previously proven designs will be reviewed for applicability prior to use.

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

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

e. Individuals or groups responsible for design reviews or other verification activities shall be identified in procedures and their authority and responsibility shall be defined and controlled. Any competent individuals or groups other than those who performed the original design but who may be from the same organization shall perform design verification. The designer's immediate supervisor or manager may perform the design verification provided:

1. The supervisor or manager is the only technically qualified individual capable of performing the verification.

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

3. The frequency and effectiveness of the supervisors or managers use as a design verifier is independently verified to guard against abuse.

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

4. Procurement Control

a. The program will ensure that purchased items and services are of acceptable quality.

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

c. The program includes provisions for taking corrective action with suppliers (qualified or otherwise) whose products and services are not considered acceptable.

d. The program includes provisions for source verification (inspection, audit, etc.) for accepting purchased items and services identified as important to safety when determined necessary.

e. The program includes provisions for involving applicable technical, regulatory, administrative, and reporting requirements (e.g., specification, codes, standards, tests, inspections, special processes, records, certifications, 10 CFR 21) for procurement documents for items and services identified as important to safety.

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

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

h. The program includes provisions for the identification of critical characteristics and methods of acceptance for the dedication of a commercial grade item or service for its use in an Important to Safety function(s).

5. Procurement Verification

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

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

c. Controls for the audits or surveys of suppliers providing Important to Safety items and services are provided for in Section C.

d. Controls for the inspection (source verification/surveillance/inspection) of suppliers providing Important to Safety items and services are provided for in Section B.12

6. Identification and Control of Items

a. The program will identify and control Important to Safety items to prevent the use of incorrect or defective items.

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

7. Handling, Storage, and Shipping

a. The program will control the handling, storage, shipping, cleaning, and preserving of items to ensure the items maintain acceptable quality.

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

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

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

8. Test Control

a. The program will demonstrate that items will perform satisfactorily in service.

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

c. Test procedures shall be developed which include:

1. Instructions and prerequisites to perform the test.

2. Use of proper test equipment.

3. Acceptance criteria, and

4. Mandatory inspections as required.

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

e. Unacceptable test results shall be evaluated for impact on safety and reportability.

9. Control of Measuring and Test Equipment

a. The program will control the calibration, maintenance, and use of measuring and test equipment consistent with an activity's importance to safety. Measuring and test equipment does not include permanently installed operating equipment or test equipment used for preliminary checks where data obtained will not be used to determine acceptability or be the basis for design or engineering evaluation. Additionally, calibration and control measures are not required for rulers, tape

measures, levels and other such devices if normal commercial manufacturing practices provide adequate accuracy.

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

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

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

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

f. If nationally recognized standards exist, calibration standards are to be traceable to them.

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

10. Inspection, Test, and Operating Status

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

b. Items whose required inspections and tests are incomplete or inconclusive may be released for further processing. Controls are provided in procedures for establishing limitations on the release, applying status indications and documenting the basis for the conditional release of the item and any limitations.

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

11. Special Process Control

a. This program will ensure that special processes identified as Important to Safety are properly controlled.

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

1. Welding,

2. Heat treating,

3. NDE (Non Destructive Examination),

4. Chemical cleaning, and

5. Unique fabricating or test processes which require in-process controls.

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

12. Inspection

a. The program will ensure the performance of inspections of Important to Safety activities in order to verify conformance with documented instructions, procedures and drawings for accomplishing the activity. The inspection program may be implemented by or for the organization performing the activity to be inspected.

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

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

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

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

f. Inspections are performed by qualified personnel other than those who performed or directly supervised the work being inspected. While performing the inspection activity, inspectors functionally report to the Quality Assurance Representative.

13. Document Control

a. The program will control the development, review, approval, issue, use, and revision of documents.

b. The scope of the document control program includes, but is not limited to:

1. Safety Analysis Report(s),

2. NRC License Documents, including Technical Specifications,

3. Design Documents,

4. Procurement Documents,

5. Procedures, Manuals, Plans, Directives, Policies, Instructions, etc.,

6. Corrective Action Documents, and

7. Other documents as defined in procedures.

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

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

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

14. Records

a. The program will ensure that sufficient records of important to safety items and activities are generated and maintained to reflect the completed work.

b. Controls for the administration, identification, receipt, storage, preservation, safekeeping, retrieval, and disposition of records are provided in procedures.

c. The scope of the records program includes but is not limited to:

1. Records required by 10 CFR 20

2. Records required by 10 CFR 50, except as permitted by the NRC exemption dated 11/21/03,

3. Records required by 10 CFR 71

4. Records required by 10 CFR 72

5. Records of Review and Audit

d. Controls for the retention of records are provided for in procedures. These controls include applicable record retention requirements of Title 10, Code of Federal Regulations and the following additional requirements:

1. The following records, except as permitted by the NRC exemption dated 11/21/03, shall be retained for at least 5 years:

a. Records and logs of ISFSI operations;

b. Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety;

c. All reportable events;

d. Records of surveillance activities, inspections, and calibrations required by the NAC UMS Certificate of Compliance or the NAC STC Certificate of compliance;

e. Records of tests and experiments;

f. Records of changes made to the procedures required by the NAC UMS Certificate of Compliance or the NAC STC Certificate of Compliance;

g. Record of changes made to programs and procedures required by Appendix C;

h. Records of radioactive shipments;

i. Records of annual physical inventory of all sealed source material .

2. The following records, except as permitted by the NRC exemption dated 11/21/03, shall be retained for the duration of the facility Operating License:

a. Record and drawing changes reflecting facility design modifications made to systems and equipment described in the current DSAR;

b. Records of irradiated fuel inventory, fuel transfers, and assembly burn up histories;

c. Records of facility radiation and contamination surveys;

d. Records of radiation exposure for all individuals entering radiation control areas;

e. Records of gaseous and liquid radioactive material released to the environs;

f. Records of training and qualification for current members of the facility staff;

g. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR

50.59 or 10 CFR 72.48;

h. Records of Independent Safety Reviews (ISR) and Independent Management Assessments;

i. Records of reviews performed for changes to the Offsite Dose Calculation Manual (ODCM)

C. AUDIT

1. Methodology

a. A program of planned and periodic audits will ensure that activities affecting quality comply with the QAP and that the QAP is being implemented effectively. Audit frequencies will be implemented as required by the applicable Code of Federal Regulations, Facility License, Final Safety Analysis Report and other commitments to the NRC.

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

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

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

2. Performance

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

1. The conformance of ISFSI operation to provisions contained within the Technical Specifications and applicable license conditions is audited at least once every 24 months. The audit shall include elements such as:

- Training and qualifications of the staff
- Actions taken to correct deficiencies occurring with equipment, structure, systems, or method of operation that affect nuclear safety.
- Performance of activities required by the QAP to meet the criteria of 10 CFR 50, Appendix B, 10 CFR 71, Subpart H and 10 CFR 72, Subpart G.
- Implementation of Programs required by Appendix C.

2. Other activities and documents as requested by the President.

b. External audits or surveys of suppliers providing Important to Safety materials, parts, equipment or services are performed at the indicated frequency or more frequently as performance dictates. Suppliers providing commercial grade calibration services who are accredited by a nationally recognized accrediting body, using procedures consistent with those found in ANSI/ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories", do not have to be periodically surveyed if the conditions of the NRC Safety Evaluation dated September 28, 2005 (see Appendix B) are met. Controls shall be established in applicable procedures to ensure the requirements of the NRC Safety Evaluation are satisfied.

c. Implementing procedures for the audit/survey program include controls to ensure that the following are met:

1. Audit/surveys shall provide an objective evaluation of quality related practices, procedures, instructions, activities, and items and a review of documents and records as applicable.

2. Audit/surveys shall be performed in accordance with approved written procedures or checklists. Deficiencies from previous audits shall be reviewed and re-audited, as appropriate. The checklists are used as guides to the auditor.

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

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

5. Implementation of any delegated elements of the quality assurance program is assessed.

6. Audit/surveys are conducted using predetermined acceptance criteria.

7. Audit/surveys are performed by appropriately trained and qualified personnel.

D. INDEPENDENT SAFETY REVIEW

1. An Independent Safety Review shall be a thorough review conducted by one or more qualified Independent Safety Reviewers. Persons performing these reviews shall be knowledgeable in the subject area being reviewed. Independent Safety Reviews must be completed prior to implementation of the proposed activity requiring the review.

a. Independent Safety Reviewers shall be individuals without direct responsibility for the performance of these activities under review. These reviews may be from the same functionally cognizant organization as the individual or group performing the original work.

b. The following subjects shall be independently reviewed by a qualified Independent Safety Reviewer:

1. Review of proposed changes to the Maine Yankee Technical Specifications, and review of those changes submitted to Maine Yankee by the NRC Certificate Holder for the NAC-UMS System or the NAC-STC System for implementation consideration.

2. Review of proposed tests and experiments not described in the SAR, NAC-UMS SAR or the NAC-STC SAR.

3. Review of proposed changes or modifications to site or ISFSI systems or equipment that affect nuclear safety.

4. Review of all procedures and programs required by Appendix C and changes thereto that require an evaluation in accordance with 10CFR50.59 or 10CFR72.48.

5. Render determination in writing to the ISFSI Manager if any items considered under 1 through 4, above, as appropriate and as provided for in 10CFR50.59, 10CFR50.90 or 10CFR72.48 as requiring prior NRC approval, a license amendment or requires a significant hazards consideration determination.

APPENDIX A

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IMPORTANT-TO-SAFETY STRUCTURES, SYSTEMS AND COMPONENTS

The pertinent quality assurance requirements of 10CFR50, Appendix B, 10CFR 71 Subpart H and 10 CFR 72 Subpart G will be applied, as a minimum, to all quality activities affecting the Important-to-Safety Structures, Systems and Components (SSCs) associated with spent fuel storage and transportation package.

NOTE

The safety classification of systems, structures and components (SSCs) of the Maine Yankee ISFSI Facility may be revised based on engineering evaluations and a revision to the Maine Yankee SAR. These modifications are controlled in accordance with the Design Control process and are not considered a reduction in the commitments to the QAP.

The quality classification of NRC Licensed ISFSI Dry Fuel Storage Components and Transportation Packages may not be revised using the Maine Yankee Design Control process. These modifications must be made by the NRC Certificate Holder. The Certificate Holder is responsible for design and licensing controls for these components under their NRC approved Quality Assurance Program. Maine Yankee utilizes these types of components and packages under the provisions of a NRC General License for Radioactive Material Transportation Packages (10 CFR 71) and Spent Fuel Storage (10 CFR 72).

Items and services associated with Radioactive Material Transport Packages as described in 10 CFR 71, and spent Fuel Storage as described in 10 CFR 72 will also fall under the requirements of the QAP.

Important-to-Safety SSCs associated with spent fuel storage and radioactive material transportation packages are defined below:

IMPORTANT-TO-SAFTY AS DEFINED BY 10 CFR 71 AND 10 CFR 72

A. Dry Spent Fuel Storage (10 CFR 72)

SSC	Quality Category	Design/License Responsible
Transportable Storage Canister and Fuel Basket Assembly	A	NAC Intl.
Vertical Concrete Cask	B	NAC Intl.
Transfer Cask and Adapter Plate	B	NAC Intl.
Lifting Yoke	B	NAC Intl.
Damaged Fuel Can	A	NAC Intl.
Reconfigured Fuel Assembly	A	NAC Intl.

IMPORTANT-TO-SAFETY, STRUCTURES, SYSTEMS AND COMPONENTS

B. Transport of Spent Fuel and GTCC Waste (10 CFR 71)

SSC	Quality Category	Design/License Responsible
Transportable Storage Canisters and Fuel Basket Assembly	A	NAC Intl.
Damaged Fuel Can	A	NAC Intl.
Reconfigured Fuel Assembly	A	NAC Intl.
Transportable Storage Canister and Basket Assembly For GTCC Waste Containers	A	NAC Intl.
Storage Transport Cask (STC)	A	NAC Intl.

C. Radioactive Material Transport Packages (10 CFR 71)

Radioactive Material Transport Packages subject to the provisions of 10 CFR 71, Subpart C, "General Licenses" are "Important-to-Safety" and subject to the applicable requirements of the QAP.

NOTES:

1. See NAC-UMS Safety Analysis Report (SAR) and associated NAC specifications for additional classification information.

2. See NAC Storage Transport Cask (STC) Safety Analysis Report and associated NAC specifications for additional classification information.

3. For the definition of Quality Categories A, B, and C, refer to NUREG/CR-6407.

APPENDIX B

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REGULATORY COMMITMENTS, ALTERNATIVES AND EXCEPTIONS TO REGULATORY COMMITMENTS

Regulatory Guide 7.10, Revision 2 (3/05), "Establishing Quality Assurance Programs for Packaging Used in the Transportation of Radioactive Material."

NUREG/CR-6407, "Classification of Transportation Packaging and Dry Fuel Storage System Components According to Important to Safety (2/96)."

ALTERNATIVES

Letter from NRC to Arizona Public Service Company titled "Palo Verde Nuclear Generating Station, Units 1, 2 and 3 – Approval of Change to Quality Assurance Program (Commercial-Grade Calibration Services) TAC Nos. MC4402, MC4403, and MC4404)" and associated NRC Safety Evaluation dated September 28, 2005.

EXCEPTIONS

Letter from NRC to Maine Yankee titled "Request for the Exemption from the Recordkeeping Requirements of 10CFR50, Appendix A Criterion 1, 10CFR50 Appendix B Section XVII and 10CFR50 Section 50.59(d)(3)", for the Maine Yankee Nuclear Power Plant, granting the exemption dated 11/21/03.

APPENDIX C

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ADMINISTRATIVE CONTROLS

SCOPE

This appendix contains additional administrative controls and specific license basis-related requirements relating to the Maine Yankee ISFSI.

The administrative controls and requirements contained herein were relocated from the MY Technical Specifications and MY License Conditions following the removal of all the spent fuel from the spent fuel pool and its placement in the ISFSI. As a result, these administrative controls have been included in this Quality Assurance Program. However, the inclusion of these administrative controls does not increase the scope of structures, systems, components or activities to which the requirements of the Quality Assurance Program apply.

Changes to the requirements detailed in this appendix shall be processed in accordance with 10 CFR 50.54(a) requirements

1) PROGRAMATIC ADMINISTRATIVE CONTROLS RELOCATED FROM MY TECHNICAL SPECIFICATIONS AND MY LICENSE CONDITIONS

a) PROCEDURES

Written procedures shall be established, implemented, and maintained covering the following activities:

i) The procedures applicable to the safe storage of irradiated fuel.

ii) Emergency Plan implementation;

iii) Quality assurance for environmental monitoring;

iv) Fire Protection Program implementation; and

v) Radiation Protection and Offsite Dose Calculation Manual.

Each procedure and changes thereto, shall be reviewed by an Independent Safety Reviewer (ISR) and approved by the ISFSI Manager prior to implementation and reviewed periodically as set forth in administrative procedures.

The following programs shall be established, implemented and maintained.

b) RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

c) OFFSITE DOSE CALCULATION MANUAL (ODCM)

The ODCM shall contain the methodology and parameters used in the calculation of off-site doses and in the conduct of the radiological environmental monitoring program; and

The ODCM shall also contain the radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Operating Report required by the ODCM.

i) Licensee initiated changes to the ODCM shall be documented and records of reviews performed shall be retained. This documentation shall contain:

(1) Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s);

(2) A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, and 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and do not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;

(3) Shall become effective after approval by the ISFSI Manager or designee; and

(4) Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radiological Environmental Operating Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

2) REPORTING REQUIREMENTS RELOCATED FROM MY TECHNICAL SPECIFICATIONS AND MY LICENSE CONDITIONS

The following report(s) shall be submitted in accordance with 10 CFR 50.4.

a) ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

The Annual Radiological Environmental Operating Report covering the plant activities during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM).

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

b) RADIOACTIVE EFFLUENT RELEASE REPORT (Site)

The Radioactive Effluent Release Report covering the activities of the site in the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant. The material provided shall be consistent with the objectives outlined in the ODCM and in accordance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

3) HIGH RADIATION AREA CONTROL REQUIREMENTS RELOCATED FROM MY TECHNICAL SPECIFICATIONS AND MY LICENSE CONDITIONS

Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100mrem/hr but <1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following site radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

i) A radiation-monitoring device that continuously indicates the radiation dose rate in the area.

ii) A radiation-monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such area with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.

iii) An individual qualified in radiation protection procedures with a radiation dose rate-monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by Radiation Protection in the RWP.

In addition to the requirements above, each high radiation area, as define in 10 CFR 20, with radiation levels ≥ 1000mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the ISFSI Manager on duty or radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

For individual high radiation areas, as defined in 10 CFR 20, with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.

SUPPORTING DOCUMENTATION FOR REVISION FOLLOWS

Maine Yankee

321 OLD FERRY RD. • WISCASSET, ME 04578-4922

November 29, 2006
MN-06-012
RA-06-043

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Reference (a) License No. DPR-36 (Docket No. 50-309, 72-30)

In accordance with 10 CFR 50.54(a)(4), Maine Yankee is submitting a proposed revision (Revision 30) to the Maine Yankee Quality Assurance Program for your review and approval. The proposed change involves a complete revision and replaces the current MYQAP.

Maine Yankee is submitting Revision 30 as a proposed change to the MYQAP to reduce commitments with ANSI Standards and Regulatory Guides and adopt the guidance of Regulatory Guide 7.10 revision 2. As permitted by 10 CFR 50.54(a)(4)(iv), Revision 30 continues to satisfy the criteria of Appendix B to 10 CFR 50 and the Quality Assurance requirements of 10 CFR 71 and 10 CFR 72.

Since the proposed change, submitted herein, is a complete revision, a mark-up was deemed impractical and is not provided. The proposed change (Revision 30) of the MYQAP is provided in Attachment 2 and a discussion of changes is provided in Attachment 1.

As the ISFSI organizations of Maine Yankee, Connecticut Yankee and Yankee Rowe continue to be consolidated, this QA Plan revision, its content and format are patterned after the recently approved and implemented changes to the QA Plans at Connecticut Yankee and Yankee Rowe.

Changes to the document result from the following:

- Reduce the level of detail associated with the methodology. The methodology details will be implemented via applicable implementing procedures;
- Integrate some of the current appendices into the body of the document.
- Remove requirement to perform audits/surveys of calibration suppliers.

As required by 10 CFR 50.54(a)(4)(ii), Attachment 1 provides a comparison of the existing program (MYQAP, Revision 29) with the proposed revision of the MYQAP (Revision 30), identifies any changes considered to be a reduction in commitment, and provides a basis for concluding the program, as changed, continues to meet the criteria of Appendix B to10 CFR 50, and the Quality Assurance Requirements of 10 CFR 71 and 10 CFR 72. It is also noted that the name of the document is being changed from MYQAP to the Quality Assurance Program (QAP).

In accordance with 10 CFR 50.54(a)(4)(iv), Maine Yankee will implement proposed Revision 30 of the QAP upon approval by the NRC or after 60 days from the date of this letter. If you should have any questions regarding this submittal, please contact at (207) 882-1312.

Sincerely,

MAINE YANKEE ATOMIC POWER COMPANY

James Connell
ISFSI Programs Manager

Attachments: As stated.

cc: Mr. S. J. Collins, NRC, Region I Administrator
Ms. M. T. Miller, Chief, Decommissioning Branch, NRC Region I
Mr. M. J. Roberts, Inspector, NRC Region I
Mr. J. R. Hall, NRC, Project Manager

ATTACHMENT 1

10CFR50.54(a) Evaluation

The purpose of this attachment is to evaluate the proposed changes to the Maine Yankee Quality Assurance Program (QAP), Revision 30. Since the proposed revision is a complete rewrite of the QAP, only the major or substantial changes are described along with the justification for those changes. It is also noted that the name of the document is being changed from MYQAP to the Quality Assurance Program (QAP).

Table of Contents

The table of contents is being revised to reflect the proposed revision. Revisions include renaming individual sections of the QAP and certain appendices. These changes are editorial in nature.

Determination of Impact

10 CFR 50.54(a)(3) does not consider quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, as a reduction in commitment. Therefore, the proposed changes may be made without prior approval of the NRC.

Sections QAP 1.0 through QAP 18.0

The proposed revision to the QAP is a complete rewrite and replaces the current MYQAP. Changes to the document result from the following:

- Reduce the level of detail associated with the methodology. The methodology details will be implemented via applicable implementing procedures;
- Integrate some of the current appendices into the body of the document.
- Remove requirement to perform audits/surveys of calibration suppliers. Specifically, Section C.2.b states: "Suppliers providing commercial grade calibration services who are accredited by nationally recognized accrediting body, using procedures consistent with those found in ANSI/ISO/IEC 17025, 'General Requirements for the Competence of Testing and Calibration Laboratories,' do not have to be periodically surveyed if the conditions of the NRC Safety Evaluation dated September 28, 2005 are met. Controls shall be established in applicable procedures to ensure the requirements of the NRC Safety Evaluation are satisfied." This alternative is included in Appendix B to the QAP.

Determination of Impact

Table 1 provides a comparison of the existing program (MYQAP, Revision 29) with the proposed revision of the QAP. As noted above the details regarding methodology existing in the current QAP description are not included in the proposed revision of the QAP. The intent of the QAP is to describe appropriate/sufficient requirements to establish how the quality assurance program meets 10 CFR 50, Appendix B, but allows flexibility in the manner by which a requirement is met. Therefore, this change in methodology details is not considered to be a reduction in commitment and the proposed changes may be made without prior approval of the NRC.

The proposed change related to audits/surveys calibration suppliers is identical the one which was approved by the NRC for Palo Verde Nuclear units. In accordance with 10 CFR 50.54(a)(3)(i), the use of a quality assurance alternative or exception approved by an NRC Safety Evaluation, provided that the bases of the approval are applicable to the licensee's facility, is acceptable for implementation without prior NRC approval. Suppliers providing commercial grade calibration services who are accredited by a nationally recognized accrediting body, using procedures consistent with those found in ANSI/ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories", do not have to be periodically surveyed if the conditions of the NRC Safety Evaluation dated September 28, 2005 are met. Controls shall be established in applicable procedures to ensure the requirements of the NRC Safety Evaluation are satisfied.

Therefore, the proposed change does not constitute a reduction in commitment and may be implemented without prior NRC approval.

Appendix A, MYQAP Qualification Requirements

The content of Appendix A has been relocated to Section A.5.d.1 of the proposed revision.

Determination of Impact

10 CFR 50.54(a)(3) does not consider quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, as reduction in commitment. Therefore, the proposed changes may be made without prior approval of the NRC.

Appendix C, ANSI Standards and Regulatory Guides

Appendix C has been moved to Appendix B and renamed Regulatory Commitments, Alternatives and Exceptions. Most of the ANSI Standards and Regulatory Guides including exceptions have been deleted

Determination of Impact

The current commitment to the referenced ANSI Standards and Regulatory Guides is unnecessary for the condition of the Maine Yankee site. All fuel has been transferred to the ISFSI. The reactor and all supporting systems and components necessary for the safe generation of electricity have been removed from the site. All safety related systems have been removed from service and have undergone demolition. The only systems that remain subject to the QA program are ISFSI related, which have been categorized as important to safety in accordance with Regulatory Guide 7.10 Revision 2. The provisions established in RG 7.10 are adequately addressed in the MYQAP and implementing procedures. Each of the Eighteen Criteria delineated in RG 7.10 were compared to the MYQAP and implementing procedures. All criteria were appropriately defined. The ISFSI is an entirely passive system. There are no complex actions needed to prevent or mitigate the consequences of an accident. There are no pumps to start, no valves to

open or close, no operator actions required, and no switches to manipulate. The system is inherently safe by its design. The main function of the ISFSI organization is to monitor the environment in a way that demonstrates the integrity of the system. This includes such items as temperature monitoring and keeping the air vents clear. While it continues to be important to maintain an appropriate quality standard that preserves the passive functionality of the system, it can be accomplished satisfactorily through conformance to RG 7.10.

For the deletion of commitment to the specified Regulatory Guides and standards, there is no USNRC Safety Evaluation which allows deletion without it being considered a reduction in commitment in accordance with 10CFR50.54(a)(4)(iv) and therefore this change may not be implemented except in accordance with that regulation.

Appendix B, MYQAP, Maine Yankee Classifications

Appendix B, MYQAP Classifications has been moved to Appendix A

Determination of Impact

10 CFR 50.54(a)(3) does not consider quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, as reduction in commitment. Therefore, the proposed changes may be made without prior approval of the NRC.

Appendix D, MYQAP Administrative Controls

Appendix D has been moved to Appendix C.

Determination of Impact

10 CFR 50.54(a)(3) does not consider quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, as reduction in commitment. Therefore, the proposed changes may be made without prior approval of the NRC.

Appendix E, Administrative Controls for Decommissioning

Appendix E The administrative controls for decommissioning have been eliminated.

Determination of Impact

10 CFR 50.54(a)(3) does not consider quality assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items, as reduction in commitment. Therefore, the proposed changes may be made without prior approval of the NRC.

Conclusion

Based on the result of this evaluation, some of the changes proposed for Revision 30 reduce the level of commitment in the Maine Yankee QAP and may not be implemented except in accordance with 10CFR50.54(a)(4)(iv) which states "Changes to the Quality Assurance Program description included or referenced in the Safety Analysis Report shall be regarded as accepted by the Commission upon receipt of a letter to this effect from the appropriate reviewing office of the Commission or 60 days after submittal to the Commission, whichever occurs first."

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
I.	Organization	Organization	A.2	Organization	0-01-1	ISFSI Organization, Audits and Review
II.	Quality Assurance Program	QA Program	A.1, A.5	QA Program	0-02-1	ISFSI Classification of SSCs
III.	Design Control	Design Control	B.2,B.3	Design Control	0-03-1	Control of Activities Controlling Permanent ISFSI Design Changes
IV.	Procurement Document Control	Procurement Document Control	B.4	Procurement Document Control	0-04-1	Procurement Controls
V.	Instructions, Procedures and Drawings	Instructions, Procedures and Drawings	A.1.d A.3.f	Instructions, Procedures and Drawings	0-05-1	Procedure use and adherence
VI.	Document Control	Document Control	B.13	Document Control	0-06-1	Document Control
VII.	Control of Purchased Material, Equipment and Services	Control of Purchased Material, Equipment and Services	B.4, B.5	Control of Purchased Material, Equipment and Services	0-07-1	Receipt of Material, Equipment and Services
VIII.	Identification and Control of Materials, Parts and Components	Identification and Control of Materials, Parts and Components	B.6	Identification and Control of Materials, Parts and Components	0-08-1	Material Identification and Control
IX.	Control of Special Processes	Control of Special Processes	B.11	Control of Special Processes	0-09-1	ISFSI Control of Special Processes
X.	Inspection	Inspection	B.12	Inspection	0-10-1	Inspection Program
XI.	Test Control	Test Control	B.8	Test Control	0-11-1	Pre-op and Operational Tests
XII.	Control of Measuring and Test Equipment	Control of Measuring and Test Equipment	B.9	Control of Measuring and Test Equipment	0-12-1	Measuring and Test Equipment
XIII	Handling, Storage and Shipping	Handling, Storage and Shipping	B.7	Handling, Storage and Shipping	0-13-1	Material Handling Storage and Shipping

XIV.	Inspection, Test and Operating Status	Inspection, Test and Operating Status	B.10	Inspection, Test and Operating Status	0-14-1	Operating Status
XV.	Nonconforming Materials, Parts or Components	Nonconforming Materials, Parts or Components	A.6.d	Nonconforming Materials, Parts or Components	0-15-1	Nonconforming Material, Parts and Components
XVI.	Corrective Actions	Corrective Actions	A.6	Corrective Actions	0-16-1	ISFSI Corrective Action Program
XVII.	Quality Assurance Records	QA Records	B.14	QA Records	0-17-1	ISFSI Records
XVIII.	Audits	Audits	C	Audits	0-18-1	ISFSI Audit Program

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

February 23, 2007

Mr. James Connell
ISFSI Manager
Maine Yankee Atomic Power Company
321 Old Ferry Road
Wiscasset, ME 04578-4922

SUBJECT: MAINE YANKEE - APPROVAL OF QUALITY ASSURANCE PROGRAM CHANGES (TAC NO. L24046)

Dear Mr. Connell:

By letter dated November 29, 2006, Maine Yankee Atomic Power Company (MYAPC) submitted a proposed revision to the quality assurance (QA) program description for Maine Yankee. The revision was submitted as a reduction in commitment under the provisions of 10 CFR 50.54(a)(4).

The proposed revision reflects program simplifications based on the plant's decommissioned status. Specifically, all spent fuel has been transferred to the Independent Spent Fuel Storage Installation (ISFSI). Consequently, the primary focus of the quality program requirements for Maine Yankee has shifted to important-to-safety ISFSI structures, systems, components, and associated processes. The Nuclear Regulatory Commission staff (the staff) notes that the quality program also continues to apply to packaging and transportation of radioactive material under 10 CFR Part 71.

The staff reviewed the proposed revision, as documented in the enclosed safety evaluation, and found that the revised program, with the reduction in commitment will continue to satisfy the criteria of 10 CFR Part 50, Appendix B, and 10 CFR 72.140(d). Therefore, the staff finds the proposed changes to the QA program for Maine Yankee acceptable.

Please contact me at (301) 415-1336, or Jim Pearson at (301) 415-1985, for any additional information or clarification you need on this subject.

Sincerely,

James R. Hall

James R. Hall, Senior Project Manager
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket Nos: 50-309, 72-030
License No.: DPR-36

Enclosure: Safety Evaluation
cc: Maine Yankee distribution list

SAFETY EVALUATION BY THE
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
PROPOSED REVISION TO THE
MAINE YANKEE QUALITY ASSURANCE PROGRAM
DOCKET NUMBERS 50-309 AND 72-030

1.0 INTRODUCTION

By letter dated November 29, 2006, Maine Yankee Atomic Power Company (the licensee) submitted a proposed revision (Revision 30) to their "Quality Assurance Program Description" to be applied at the Maine Yankee Atomic Power Station. This quality assurance (QA) program revision was submitted as a reduction in commitment under the provisions of 10 CFR 50.54(a)(4). The proposed QA program revision reflects changes and program simplification based primarily on having transferred all spent fuel from the spent fuel pool to dry cask storage in the Independent Spent Fuel Storage Installation (ISFSI), and also in consideration of the plant's current extensively decommissioned status.

2.0 BACKGROUND

The licensee previously submitted certification of permanent cessation of operations and certification of permanent fuel removal. Subsequently, the licensee has accomplished significant decommissioning of the facility including removal of many major components. All spent fuel has been transferred to the Independent Spent Fuel Storage Installation (ISFSI). As a result of the decommissioning activities, the licensee states that there are no longer any safety-related structures, systems, or components (SSCs) at the facility. The QA program, however, continues to apply to the ISFSI components identified as "Important to Safety" and to other select areas, such as radiological safety and transportation of radioactive materials.

3.0 EVALUATION

3.1 Basis of Evaluation

The existing Maine Yankee QA program (MYQAP) is considered to meet the criteria in Appendix B to 10 CFR Part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." Appendix B establishes quality assurance requirements for the design, fabrication, construction, testing, and operation of nuclear power plant safety-related SSCs. During decommissioning, the regulations require the licensee to maintain a QA program that complies with Appendix B until the Part 50 license is terminated.

An acceptable way of establishing QA program compliance with the requirements of 10 CFR Part 50, Appendix B, quality assurance criteria in support of ISFSI operation and maintenance is by reviewing and evaluating the licensee's commitment to the applicable ANSI Standards and corresponding NRC Regulatory Guides. The proposed changes to the MYQAP were qualitatively evaluated and judged based on changes and exceptions to previous commitments to these ANSI standards and associated regulatory guides in the context of the current decommissioning status of the facility.

The changes were also evaluated to ensure continued compliance of the QA program with quality assurance regulations for ISFSIs per 10 CFR 72.140(d). Evaluation of the acceptability

of the QA program changes relative to the ISFSI was performed in accordance with the guidance of NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities," which provides a well-defined, uniform basis for evaluating proposed changes to licensee commitments.

Therefore, this evaluation reviews the MYQAP changes for conformance with both 10 CFR Part 50, Appendix B, and 10 CFR Part 72, Subpart G.

3.2 Assessment of QA Program Against 10 CFR Part 72, Subpart G

The staff reviewed and evaluated the proposed changes in Revision 30 of the QA program for Maine Yankee, in order to determine whether the MYQAP, as revised, will continue to comply with the requirements of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste," Subpart G, "Quality Assurance."

(a) Areas Reviewed:

The complete submittal was reviewed by the staff to confirm that the corresponding guidance for each of the Part 50 and Part 72 quality criteria listed below were acceptably addressed in the revised program:

Quality assurance organization
Quality assurance program
Design control
Procurement document control
Instructions, procedures, and drawings
Document control
Control of purchased material, equipment, and services
Identification and control of materials, parts, and components
Control of special processes
Licensee and certificate holder inspection
Test control
Control of measuring and test equipment
Handling, storage, and shipping control
Inspection, test, and operating status
Nonconforming materials, parts, or components
Corrective action
Quality assurance records
Audits

NUREG-1567 provides specific guidance for evaluating the licensee's quality program changes against the above 18 quality criteria in regard to spent fuel dry storage facilities. Based on the staff's review of the MYQAP, the staff has determined that the proposed revision continues to meet the requirements of Subpart G of 10 CFR Part 72. While this evaluation has determined that the MYQAP is acceptable, continued proper implementation of the quality program plan will be assessed during future NRC inspections.

(b) Evaluation Findings

The MYQAP describes requirements, procedures, and controls that, when properly implemented, comply with requirements of both 10 CFR Part 50 and 10 CFR Part 72.

The structure of the organization and assignment of responsibility for each activity ensures that designated parties will perform the work to achieve and maintain specified quality requirements.

Conformance to established requirements will be verified by qualified personnel and groups not directly responsible for the activity being performed. These personnel and groups report through a management hierarchy which grants the necessary authority and organizational freedom and provide sufficient independence from economic and scheduling influences.

The quality program plan provides adequate control over activities affecting quality, as well as structures, systems, and components important to safety, consistent with their relative importance to safety.

The Quality Assurance Program for Maine Yankee, Revision 30, is found to meet the requirements of 10 CFR Part 50, Appendix B, and Part 72, Subpart G, based on the review described above.

4.0 CONCLUSION

The proposed changes to the licensee's QA program as described above will continue to satisfy the criteria of Appendix B to 10 CFR Part 50, and Subpart G of 10 CFR Part 72.

Principal Contributor: J. Pearson

Date: February 2007