CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT
362 INJUN HOLLOW ROAD • EAST HAMPTON, CT 06424-3099

December 2, 2013
CY-13-051
10 CFR 50.71(e)(4)

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-001

Connecticut Yankee Atomic Power Company
Haddam Neck Plant Independent Spent Fuel Storage Installation
NRC License No. DPR-61 (NRC Docket Nos. 50-213 and 72-39)

Subject: Biennial Update of the CYAPCO Quality Assurance Program for the Haddam Neck ISFSI

Connecticut Yankee Atomic Power Company (CYAPCO) herewith encloses a paper copy of the CYAPCO Quality Assurance Program (QAP) for the Haddam Neck Independent Spent Fuel Storage Installation (ISFSI).

This will serve as the biennial update of the CYAPCO QAP for the Haddam Neck ISFSI, which is being submitted in accordance with the requirements of 10 CFR 50.71(e)(4). This replaces in its entirety the previous update of the CYAPCO QAP, which was last submitted to the Nuclear Regulatory Commission (NRC) on December 1, 2011.

This is the most recent update as of December 2, 2013 and reflects changes made in Revisions 11 and 12. Enclosure 1 contains Revision 12 of the CYAPCO QAP for the Haddam Neck ISFSI. Enclosure 2 contains a summary table, which identifies the changes made in Revision 11 and an evaluation and justification for each of the changes. Enclosure 3 identifies the changes made in Revision 12 and an evaluation and justification for the changes. The changes contained in these revisions either did not reduce commitments in the CYAPCO QAP for the Haddam Neck ISFSI previously accepted by the NRC or were previously approved by the NRC and the NRC issued a Safety Evaluation Report (SER) describing the approval and alternatives. The information contained in Enclosures 1, 2 and 3 accurately reflects the changes made to the CYAPCO QAP for the Haddam Neck ISFSI since the previous submittal.

Should you require additional information please contact me at 860-573-3768 or Brantley Buerger at 860-267-4626, Extension 303.

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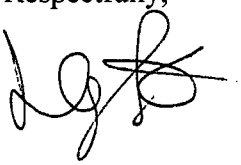
I state under penalty of perjury that the foregoing is true and correct.

Executed on December 2, 2013.

Respectfully,



Wayne Norton
CYAPCO President and Chief Executive Officer

Enclosures:
1 – CYAPCO Quality Assurance Program (QAP) for the Haddam Neck ISFSI, Revision 12
2 – Summary of Changes to the CYAPCO QAP for the Haddam Neck ISFSI Implemented in Revision 11
3 – Summary of Changes to the CYAPCO QAP for the Haddam Neck ISFSI Implemented in Revision 12

cc: J. Goshen, Project Manager, NRC Headquarters
W. Dean, Regional Administrator, NRC Region I
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ENCLOSURE 1 TO CY-13-051
CYAPCO QUALITY ASSURANCE PROGRAM (QAP)
FOR THE HADDAM NECK ISFSI
REVISION 12

Connecticut Yankee Atomic Power Company

Quality Assurance Program

For The

Haddam Neck ISFSI

Revision 12

Prepared By: Joseph Bourassa **Date:** 10/8/13

Approved By: Joseph Bourassa **Date:** 10/8/13

Approved By: [signature] **Date:** 10-8-13

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A. MANAGEMENT

1. Methodology

a. The Quality Assurance Program (QAP) previously known as Connecticut Yankee Quality Assurance Program (CYQAP) provides a consolidated overview of the quality program controls which govern the operation and maintenance of the 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 (10CFR50, Appendix B and 10 CFR 72). The QAP also applies to transportation packages licensed by the NRC under 10 CFR 71. Implementation of the 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, as well as in an organization chart provided in Appendix D. 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 and Chief Executive Officer (CEO) reports to the CYAPCO Board of Directors and has ultimate responsibility for the operation of the ISFSI.

b. The President and CEO and has overall responsibility for the QAP and operation of the ISFSI. The President and CEO resolves all disputes related to the implementation of the QAP for which resolution is not achieved at the appropriate organizational levels within CYAPCO.

c. The individuals fulfilling the following management functions report to the President and CEO. 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 CEO and is responsible for the direction and administration of ISFSI Operations, Site Training, Procurement, Security, Emergency Planning, and the Non-conformance and Corrective Actions Programs. The Independent Safety Review Function (ISR), described in Section D, reports to the ISFSI Manager.

2. Quality Assurance Representative – Reports to the President and CEO and is responsible for the audit/survey and surveillance functions described in the QAP. The Quality Assurance Representative is designated by and has a direct line of communication with the President and CEO.

3. Radiation Protection Manager (RPM) – Reports to the ISFSI Manager and is responsible for the Radiation Protection Program.

3. Responsibility

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

b. CYAPCO 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 and CEO of CYAPCO.

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

e. Supervision is 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. Procedures that implement QAP requirements are approved by the ISFSI Manager. These procedures shall reflect the requirements of the QAP and work is required to be accomplished in accordance with them.

4. Authority

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

b. The Quality Assurance Representative 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 has the authority and organizational freedom to verify activities affecting quality and is independent of undue influences and responsibilities for schedules and costs. The Quality Assurance Representative has the responsibility and authority to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming materials. The individual 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 Quality Assurance Representative 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. Bachelor's Degree in Engineering or the Physical Sciences, or shall have equivalent qualifications.

c. Knowledge in the subject areas requiring review.

d. At least 5 years of professional experience.

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

6. Corrective Action

a. Each individual working at CYAPCO 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 CYAPCO 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.

c. Guidance applicable to safety related items and activities (10 CFR 50) is 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 CYAPCO 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 that are expected to be encountered.

d. Independent design verification is to be completed before design outputs are used by other organizations for design work and before they are used to support other activities such as procurement, manufacture, or construction. When this timing cannot be achieved, the unverified portion of the design is to be identified and controlled. In all cases, the design verification is to be completed before relying on the item to perform its 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. Design verification shall be performed by any competent individuals or groups other than those who performed the original design but who may be from the same organization. The designer's immediate supervisor 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 manager's management.

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 activities 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. Special processes are 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. 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.

d. 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.

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

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

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

h. 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 granted exemption, dated September 9, 2005;

3. Records required by 10 CFR 71;

4. Records required by 10 CFR 72; and

5. Records of Reviews and Audits.

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 NRC granted exemption dated September 9, 2005, 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 MPC 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 MPC 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; and

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

2. The following records, except as permitted by the NRC granted exemption dated September 9, 2005, 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 UFSAR;

b. Records of irradiated fuel inventory, fuel transfers, and assembly burnup 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; and

i. Records of reviews performed for changes to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM), the Offsite Dose Calculation Manual (ODCM) and the Process Control Program.

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

h. Records of radioactive shipments; and

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

2. The following records, except as permitted by the NRC granted exemption dated September 9, 2005, 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 UFSAR;

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

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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; and

i. Records of reviews performed for changes to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM), the Offsite Dose Calculation Manual (ODCM) and the Process Control Program.

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, Updated 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; and
- Implementation of Programs required by Appendix C, Sections 1.0 and 2.0

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 reaudited, 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 are 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 HNP Technical Specifications, and review of those changes submitted to CYAPCO by the NRC Certificate Holder for the NAC-MPC System or the NAC-STC System that are to be implemented at the Haddam Neck Site.

2. Review of proposed tests and experiments not described in the UFSAR, NAC-MPC FSAR or the NAC-STC FSAR for activities being implemented at the Haddam Neck Site.

3. Review of proposed changes or modifications to plant 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 ISFSI Facility may be revised based on engineering evaluations and a revision to the CY UFSAR during the decommissioning process. These modifications are controlled in accordance with the CY 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 CYAPCO 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. CYAPCO 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).

In addition to these SSCs, 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.
ISFSI Pad	C	CYAPCO
Lifting Yoke	B	NAC Intl.
Damaged Fuel Can	A	NAC Intl.
Reconfigured Fuel Assembly	A	NAC Intl.

APPENDIX A

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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-MPC Final Safety Analysis Report (FSAR) 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

REGULATORY COMMITMENTS, ALTERNATIVES AND EXCEPTIONS

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 Wayne Norton, dated September 9, 2005, "Request for Exemption From Recordkeeping Requirements of 10 CFR 50 Appendix A Criterion 1, 10 CFR 50 Appendix B Criterion XVII, and 10 CFR 50.59(d)(3) for the Haddam Neck Plant".

APPENDIX C

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ADMINISTRATIVE CONTROLS

These Administrative Controls have been developed to support the Operation of the ISFSI. These requirements were previously included in the Technical Specifications and were relocated to the Quality Assurance Program.

1.0 Procedures and Programs

1.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

a. The procedures applicable to the safe storage of spent fuel;

b. Fire Protection Program implementation; and

c. Radiation Protection and Offsite Dose Calculation Manual.

1.2 Each procedure and changes thereto, shall be independently reviewed in accordance with Section D and approved by the ISFSI Manager or designee prior to implementation.

2.0 Programs and Manuals

2.1 Radiation Protection Program

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

2.2 Offsite Dose Calculation Manual (ODCM)

The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from ISFSI operations and in the conduct of the radiological environmental monitoring program.

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 and Radioactive Effluent Release Reports required by the ODCM.

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 and Radioactive Effluent Release Reports required under Section 2.3 and the ODCM.

APPENDIX C

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ADMINISTRATIVE CONTROLS

Changes to the ODCM:

a. Shall be documented and records of review shall be retained. This documentation shall contain:

1. sufficient information to support each change, together with the appropriate analyses or evaluations to justify the change; and

2. a determination that each change maintains the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, 10 CFR 50, Appendix I, 10 CFR 72.104 and that the change will not adversely impact the accuracy or reliability of dose calculations.

b. Each change shall be identified by markings in the margin of the affected pages clearly indicating the area of the page that has changed, and shall indicate the date (i.e., month and year) the change was implemented.

c. 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 Radioactive Effluent Release Report for the period of the report in which any change was made to the ODCM. A summary of each change shall be included.

2.3 Reporting Requirements

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

2.3.1 Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the activities of the facility during the previous calendar year shall be submitted prior to May 1 of each year. The Report shall include summaries, interpretations, and analyses of the 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 all environmental radiation measurements taken during the period pursuant to the locations specified in the tables and figures in the ODCM, as well as summarized and tabulated results of these measurements. In the event that some individual results are not available for inclusion with the report, the submitted report shall note and explain the reasons for the missing results. The missing data shall be submitted in a supplementary report.

APPENDIX C

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ADMINISTRATIVE CONTROLS

2.3.2 Annual Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility shall be submitted 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 facility, as needed. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program (if required).

The Radioactive Effluent Release Report covering the activities during the previous calendar year shall be submitted by May 1 of each year.

The Annual Radioactive Effluent Release Report shall include licensee-initiated changes to the ODCM during the period of the report as described in Section 2.3.

2.4 High Radiation Area Control

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.

APPENDIX C

(Page 4 of 5)
ADMINISTRATIVE CONTROLS

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, 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.

NOTE

Each of the inspections and/or tests shall be performed within the specified FREQUENCY with a maximum allowable extension not to exceed 25% of the specified FREQUENCY.

2.5 Sealed Source Contamination

2.5.1 Limiting Condition for Operation

Each sealed source containing radioactive material either in excess of 100 micro Curies of beta and/or gamma emitting material or 5 microCuries of alpha emitting material shall be free of greater than or equal to 0.005 microCurie of removable contamination.

Applicability

At all times

Action

Each sealed source with removable contamination in excess of the above limits shall be immediately withdrawn from use and either:

APPENDIX C

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ADMINISTRATIVE CONTROLS

a. Decontaminate and repair the sealed source; or

b. Dispose of the sealed source in accordance with Commission Regulations.

2.5.2 Inspection and Testing Requirements

a. Test Requirements – Each sealed source shall be tested for leakage and/or contamination by:

1. The licensee; or

2. Other persons specially authorized by the Commission or an Agreement State.

b. Test frequencies – Each category of sealed sources (excluding startup sources and fission detectors previously subjected to core flux) shall be tested at the frequency described below.

1. Sources in use – At least once per 6 months (184 days) for all sealed sources containing radioactive materials:

a) With a half-life greater than 30 days (excluding Hydrogen 3); and

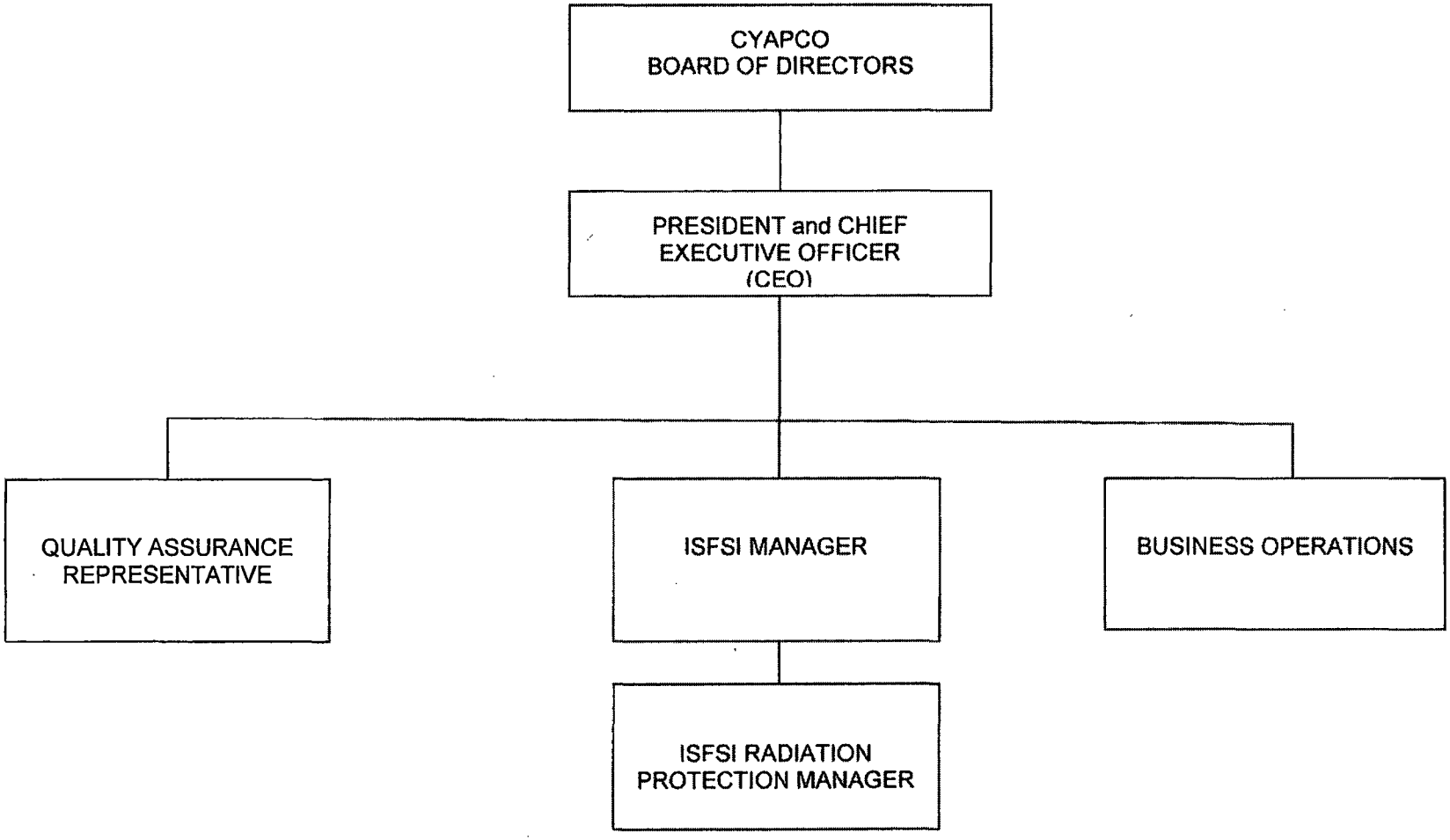
b) In any form other than gas.

2. Stored sources not in use – Each sealed source and fission detector shall be tested prior to use or transfer to another licensee unless tested within the previous 6 months (184 days). Sealed sources and fission detectors transferred without a certificate indicating the last test date shall be tested prior to being placed into use; and

3. Startup sources and fission detectors – Each sealed startup source and fission detector shall be tested following repair of maintenance to the source.

c. Reports – A report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of greater than 0.005 microCurie of removable contamination.

APPENDIX D
ORGANIZATION CHART



ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN
REVISION 11

The attached table describes the changes implemented in Revision 11 to the Connecticut Yankee Atomic Power Company (CYAPCO) Quality Assurance Program (QAP) for the Haddam Neck Independent Spent Fuel Storage Installation (ISFSI). It defines the affected section of the QAP, a description of the change, and an evaluation and justification for the change. These changes either did not reduce commitments in the QAP previously accepted by the Nuclear Regulatory Commission (NRC) or were previously approved by the NRC and the NRC issued a Safety Evaluation Report (SER) that described the approval and alternatives.

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
Table of Contents		
The table of contents changed the page numbers for some of the sections.		Minor administrative changes are considered editorial and do not constitute a reduction in commitments to the previously approved CYAPCO QAP for the Haddam Neck ISFSI.
Section A - Management		
Item A.1	No changes were made to this section.	N/A
Item A.2	The change with the description of the Organization section was made to clarify the ISFSI Manager position responsibilities. The change also modifies some responsibilities and better aligns the expectations for reporting of the Quality Assurance (QA) Representative to the President rather than the ISFSI Manager. These changes bring the CYAPCO QAP for the Haddam Neck ISFSI more in line to those that were previously approved by the NRC in Revision 30 of the Maine Yankee (MY) QAP.	These changes to the Organization section are clarifications, editorial and administrative changes to the Organization section. These changes make the CYAPCO QAP for the Haddam Neck ISFSI consistent with the one approved by the NRC for MY (Revision 30). These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Item A.3	The change to the Responsibilities section provides several minor organizational clarifications.	Clarifications are considered minor changes and do not constitute a reduction in commitments to the previously approved QAP.
Item A.4	The change to the Authority section provides several minor editorial changes.	Minor administrative changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP.
Item A.5	The change with the Personnel Training and Qualifications section deletes commitments to Regulatory Guide 1.8 – 1-R-5/77, "Personnel Selection and Training" in Section A.5.a and ANSI N18.1-1971 in Section A.5.d.3.b and adds specific guidance for determining and assessing staff qualifications. This guidance is the same as approved by the NRC as an alternative for the MY QAP. This change reflects the deletion of these as commitments in Appendix B of the	Although this change is a reduction in commitments to the previously approved QAP, it was implemented without requiring prior NRC approval because the change was previously approved by the NRC at MY and the NRC issued a Safety Evaluation Report (SER) describing the approval and alternatives. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because proposed changes for Revision 30 included reductions in commitments to the previously approved MY QAP. This proposed change included the elimination of all commitments to Regulatory Guides (except Regulatory Guide 7.10, Revision 2, "Establishing Quality Assurance Programs for Packaging Used in the

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
	QAP.	Transportation of Radioactive Material") and ANSI Standards. The NRC completed its review and issued an SER and approval of the alternatives as documented in a letter from James R. Hall of the NRC to James Connell of MY, "MY – Approval of Quality Assurance Program Changes (TAC No. L24046)." The CYAPCO QAP change eliminates the commitments to Regulatory Guides (except Regulatory Guide 7.10) and ANSI N18.1, which is the same as was approved by the NRC for the MY QAP and is described in the NRC SER. The status of the Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval (2007 stand-alone ISFSI), thus implementing this change is a reduction in commitment that was previously approved by the NRC and can be implemented without prior NRC approval. These changes can be implemented without prior NRC Approval, based on the guidance provided in 10CFR 50.54(a)(3).
Item A.6	No changes were made with this section.	N/A
Item A.7	No changes were made with this section other than a typographical error.	Minor administrative changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP. This change could be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Section B - Performance/Verification		
Item B.1	No changes were made with this section.	N/A
Item B.2	No changes were made with this section.	N/A
Item B.3	No changes were made with this section.	N/A
Item B.4	No changes were made with this section.	N/A
Item B.5	No changes were made with this section.	N/A
Item B.6	No changes were made with this section.	N/A
Item B.7	No changes were made with this section.	N/A
Item B.8	No changes were made with this section.	N/A

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
Item B.9	No changes were made with this section.	N/A
Item B.10	No changes were made with this section.	N/A
Item B.11	No changes were made with this section.	N/A
Item B.12	No changes were made with this section.	N/A
Item B.13	The only change made to the Document Control section was to correct a typographical error.	Minor changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP. This change can be implemented without prior NRC approval, based on the guidance provided in 10CFR50.54(a)(3).
Item B.14	The only changes that were made to the Records Control section were to correct typographical errors.	Minor typographical changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Section C - Audit		
The only changes that were made to the Audit section were editorial or to correct typographical errors.		Minor typographical changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Section D – Independent Safety Review		
The changes made to the Independent Safety Review section were administrative clarifications with the language provided in Items D.1.b.1 and 2 with regard to responsibilities for performing Independent Safety Reviews related to the Certificate Holder's dry fuel storage and transportation systems.		These changes are considered administrative clarifications to ensure the intent of the requirements are clearly defined and can be implemented. These clarifications do not constitute a reduction in commitments to the previously approved QAP. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Appendix A – Important to Safety System Structures and Components		
No changes were made with this section.		N/A
Appendix B – Regulatory Commitments, Alternatives and Exceptions		
The change deletes commitments to the following:		Although this change is a reduction in commitments to the previously approved

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
	• Regulatory Guide 1.8 – 1-R-5/77 – "Personnel Selection and Training" – Endorses ANSI N18.1-1971 • Regulatory Guide 1.70 – "A Guide for the Organization and Content of Safety Analysis Reports"	QAP, it was implemented without requiring prior NRC approval because the change was previously approved by the NRC at MY and the NRC issued a SER describing the approval and alternatives. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because proposed changes for Revision 30 included reductions in commitments to the previously approved MY QAP. This proposed change included the elimination of all commitments to Regulatory Guides (except Regulatory Guide 7.10, Revision 2, "Establishing Quality Assurance Programs for Packaging Used in the Transportation of Radioactive Material") and ANSI Standards. The NRC completed its review and issued an SER and approval of the alternatives as documented in a letter from James R. Hall of the NRC to James Connell of MY, "MY – Approval of Quality Assurance Program Changes (TAC No. L24046)." The CYAPCO QAP change eliminates the commitments to Regulatory Guides (except Regulatory Guide 7.10) and ANSI N18.1, which is the same as was approved by the NRC for the MY QAP and is described in the NRC SER. The status of the Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval (2007 stand-alone ISFSI), thus implementing this change is a reduction in commitment that was previously approved by the NRC and can be implemented without prior NRC approval. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
Appendix C – Administrative Controls (Sections were renumbered after the change is implemented.)		
1.0 – Procedures and Programs		
1.1 & 1.2	The changes made to the Procedures and Programs section modifies Items 1.1.b and 1.1.d to be consistent with the change implemented by MY in Revision 30 and was approved by the NRC and clarifies Item 1.2 to reflect the changes noted with Items 1.1.b and 1.1.d and to state the fact that the ISFSI Manager is the "designated manager."	Although these changes by themselves are not considered a reduction in commitments to the previously approved QAP, they are consistent with changes previously approved by the NRC at MY in which the NRC issued a SER describing the basis for the approval. With regard to the change made with item 1.1.b, all of the remaining programs are now covered in Section 1.0 so there is effectively no change other than administrative. For item d, eliminating the requirement for having a process for controlling temporary changes to procedures is not a reduction in commitments and eliminates some flexibility that was provided within this section. Clarifying that the designated manager is the ISFSI Manager is not a reduction, but provides more specific guidance for this organizational responsibility. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.0 – Programs and Manuals		
2.1	No changes were made to the Radiation Protection Program section.	N/A
2.2	The change made to the Process Control Program (PCP) section contained in Item 2.2 was to eliminate this section, which is consistent with the change implemented by MY in Revision 30 and was approved by the NRC.	Although the change to eliminate the discussion of PCP is a reduction in commitments to the previously approved QAP, it can be implemented without requiring prior NRC approval because the change was previously approved by the NRC at MY and the NRC issued a SER describing the approval. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because Revision 30 included reductions in commitments to the previously approved QAP. This change included the elimination of all discussion of the PCP. The NRC completed its review and issued an SER and approval as documented in a letter from James R. Hall of the NRC to James Connell of MY, "MY – Approval of Quality Assurance Program Changes (TAC No. L24046)." The CYAPCO QAP change eliminates the discussion of the PCP, which is consistent with what was approved by the NRC and described in the associated SER. The status of Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval

QAP Section	Change(s)	Evaluation and Justification
		(2007 stand-alone ISFSI), thus implementing this change is a reduction in commitment that was previously approved by the NRC and can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.3	This change to the Offsite Dose Calculation Manual (ODCM) section adds additional guidance to Section 2.3 (will be 2.2) regarding the ODCM and clarifies some of the language, which is consistent with the MY Revision 30 that was approved by the NRC. The change added language regarding the Annual Reports and the Radiological Environmental Monitoring Program (REMP). The change also added a requirement to consider 10CFR72.104 when making changes to the ODCM which is considered an enhancement, which was added to Section 2.3.a.2 (will be 2.2.a.2).	The change to modify the language in the ODCM section is primarily administrative clarifies language and adds additional guidance regarding the ODCM. This change was previously approved by the NRC at MY and the NRC issued a SER describing the approval. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because Revision 30 included reductions in commitments to the previously approved QAP. Although these are only clarifications the same language was approved previously by the NRC in the MY QAP. The change also adds the requirement to consider 10CFR72.104, which is considered an enhancement to ensure this additional license bases is adequately addressed. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.4	The change made to the Radioactive Effluent Control Program (RECP) section contained in Item 2.4 was to eliminate this section, which is consistent with the change implemented by MY in Revision 30 and was approved by the NRC. The actual limited requirements for the RECP are now included within other sections of Appendix C of the QAP and in the ODCM.	Although the change to eliminate the discussion of RECP is a reduction in commitments to the previously approved QAP, it can be implemented without requiring prior NRC approval because the change was previously approved by the NRC at MY and the NRC issued a SER describing the approval. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because Revision 30 included reductions in commitments to the previously approved QAP. This change included the elimination of all discussion of the RECP. The NRC completed its review and issued an SER and approval as documented in a letter from James R. Hall of the NRC to James Connell of MY, "MY – Approval of Quality Assurance Program Changes (TAC No. L24046)." The CYAPCO QAP change eliminates the discussion of the RECP, which is consistent with what was approved by the NRC and described in the associated SER. The status of the Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval (2007 stand-alone ISFSI), thus implementing this change is a reduction in commitment that was previously approved by the NRC and can be implemented

QAP Section	Change(s)	Evaluation and Justification
		without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.5	The change made to the Radioactive Environmental Monitoring Program (REMP) section contained in Item 2.5 was to eliminate this section, which is consistent with the change implemented by MY in Revision 30 and was approved by the NRC. The actual limited requirements for the REMP are now included within other sections of Appendix C of the QAP and in the ODCM.	Although the change to eliminate the discussion of REMP is a reduction in commitments to the previously approved QAP, it can be implemented without requiring prior NRC approval because the change was previously approved by the NRC at MY and the NRC issued a SER describing the approval. The basis is that the MY QAP was submitted to the NRC for prior approval in 2006 because Revision 30 included reductions in commitments to the previously approved QAP. This change included the elimination of all discussion of the REMP. The NRC completed its review and issued an SER and approval as documented in a letter from James R. Hall of the NRC to James Connell of MY, "MY – Approval of Quality Assurance Program Changes (TAC No. L24046)." The CYAPCO QAP change eliminates the discussion of the REMP, which is consistent with what was approved by the NRC and described in the associated SER. The status of the Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval (2007 stand-alone ISFSI), thus implementing this change is a reduction in commitment that was previously approved by the NRC and can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.6	The statement "The following report(s) shall be submitted in accordance with 10 CFR 50.4" was added to the Reporting Requirements section to be consistent with Revision 30 of the MY QAP that was approved by the NRC and the section was renumbered.	Minor administrative changes are considered editorial and do not constitute a reduction in commitments to the previously approved QAP. This change can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.7	The High Radiation Area Control section was completely replaced with the language provided within Revision 30 of the MY QAP and the section was renumbered.	The change to the High Radiation Area Control section is a complete modification, although the intent of the controls has not changed and the new language is actually nearly identical to what had been previously included in the CYAPCO QAP in the early 2000s. The language is the same as was previously approved by the NRC in Revision 30 of the MY QAP. The status of the Haddam Neck Plant is the same as the condition of the MY Plant at the time of the approval (2007 stand-alone ISFSI). Because the change is considered administrative, the same controls exist and the language is consistent with the previously NRC approved MY QAP,

ENCLOSURE 2 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 11

QAP Section	Change(s)	Evaluation and Justification
		it can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
2.8	The Sealed Source Contamination section was renumbered.	Minor editorial changes do not constitute a reduction in commitments to the previously approved QAP. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).
Appendix D – Organization Chart		
Org. Chart	Changes were made to the Organizational Chart to split the position block of the ISFSI Radiation Protection Manager and the QA Representative to ensure it is clear that these are two (2) separate functions. The change was also made for the QA Representative to report directly to the President and Chief Executive Officer (CEO). This also reflects the changes made to Section A.2, "Organization." This change allows eliminates the note that was provided regarding the designation of and communications from the QA Representative to the President and CEO.	This change corrects the fact that there are two (2) separate QAP functions and clarifies the QA Representative reporting chain, which is now directly to the President. This is an enhancement to the previous organization chart and structure thus there is no reduction in commitments to the previously approved QAP. These changes can be implemented without prior NRC approval, based on the guidance provided in 10CFR 50.54(a)(3).

ENCLOSURE 3 TO CY-13-051
SUMMARY TABLE FOR CHANGES TO
CYAPCO QAP FOR THE HADDAM NECK ISFSI IMPLEMENTED IN REVISION 12

The changes implemented in Revision 12 to the Connecticut Yankee Atomic Power Company (CYAPCO) Quality Assurance Program (QAP) for the Haddam Neck Independent Spent Fuel Storage Installation (ISFSI) are described below. These changes were minor in nature and did not constitute a reduction in commitment to the previously approved QAP document.

The changes made with Revision 12 were to correct several minor formatting, punctuation and editorial items that were included in several sections (A.2, B.3, B.14, Appendix A and Appendix C, Section 2.2) of Revision 12 of the CYAPCO QAP for the Haddam Neck ISFSI. A number of general formatting changes were made throughout the document, as well. All of the proposed changes were considered minor in nature (e.g., administrative improvements, spelling corrections, punctuation, or editorial items) in accordance with the guidance provided in 10CFR50.54(a)(3).