



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PA 19406-2713

ICY-16-011

May 18, 2016

Docket Nos. 05000213  
07200039

License Nos. DPR-61  
SFGL-21

Robert Mitchell  
ISFSI Manager  
Connecticut Yankee Atomic Power Company  
362 Injun Hollow Road  
East Hampton, CT 06424

SUBJECT: NRC INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION  
REPORT NOS. 05000213/2016001 AND 07200039/2016001, CONNECTICUT  
YANKEE ATOMIC POWER COMPANY, EAST HAMPTON, CONNECTICUT  
SITE

Dear Mr. Mitchell:

On April 21, 2016, the U.S. Nuclear Regulatory Commission (NRC) conducted a safety inspection at the Connecticut Yankee Atomic Power Company (Connecticut Yankee) Independent Spent Fuel Storage Installation (ISFSI). The inspection examined activities under your license as they relate to safety and compliance with the Commission's regulations and the conditions of your license. The inspection consisted of observations by the inspector, interviews with personnel, and a review of records and procedures. The results of the inspection were discussed with you at the conclusion of the inspection. The enclosed report presents the results of this inspection.

Within the scope of this inspection, no violations were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select Nuclear Materials; Med, Ind, & Academic Uses; then Regulations, Guidance and Communications. The current Enforcement Policy is included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents; then Enforcement Policy (Under 'Related Information'). You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

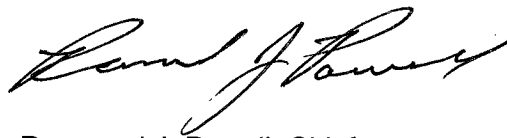
R. Mitchell

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The NRC's Safety Culture Policy Statement became effective in June 2011. While a policy statement and not a regulation, it sets forth the agency's expectations for individual and organizations to establish and maintain a positive safety culture. You can access the policy statement and supporting material that may benefit your organization on NRC's safety culture web site at <http://www.nrc.gov/about-nrc/safety-culture.html>. We strongly encourage you to review this material and adapt it to your particular needs in order to develop and maintain a positive safety culture as you engage in NRC-regulated activities.

No reply to this letter is required. Please contact John Nicholson at 610-337-5236 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond J. Powell". The signature is fluid and cursive, written in a professional style.

Raymond J. Powell, Chief  
Decommissioning and Technical Support  
Branch  
Division of Nuclear Materials Safety

cc: Jeffery Semancik, Director, Radiation Division  
Robert Snook, Assistant Attorney General  
State of Connecticut

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Inspection No. 07200039/2016001  
Docket Nos. 05000213 and 07200039  
License Nos. DPR-61 and SFGL-21  
Licensee: Connecticut Yankee Atomic Power Company  
Location: 362 Injun Hollow Road, East Hampton, CT 06424  
Inspection Dates: April 21, 2016  
Inspectors: John Nicholson  
Senior Health Physicist  
Decommissioning and Technical Support Branch  
Division of Nuclear Materials Safety  
Briana DeBoer  
Health Physicist  
Decommissioning and Technical Support Branch  
Division of Nuclear Materials Safety  
Approved By: Raymond J. Powell, Chief  
Decommissioning and Technical Support Branch  
Division of Nuclear Materials Safety

## EXECUTIVE SUMMARY

Connecticut Yankee Atomic Power Company  
NRC Inspection Report No. 07200039/2016001

An announced safety inspection was conducted on April 21, 2016, at the Connecticut Yankee Atomic Power Company (Connecticut Yankee) Independent Spent Fuel Storage Installation (ISFSI). The inspector assessed whether Connecticut Yankee personnel were operating and maintaining ISFSI programs at an away-from-reactor (AFR) ISFSI in conformance with the commitments and requirements contained in the Final Safety Analysis Report (FSAR), Safety Evaluation Report (SER), Certificate of Compliance (CoC), Technical Specifications (TS), Quality Assurance (QA) program, Connecticut Yankee procedures, and 10 Code of Federal Regulations (CFR) Part 72. The inspector's review was directed toward confirming the ongoing adequacy of the radiation protection, fire protection, emergency preparedness, surveillance, maintenance, environmental monitoring, training, QA, and corrective action programs. The inspector observed activities, interviewed personnel, and reviewed records and procedures. Based on the results of this inspection, no findings of significance were identified.

## REPORT DETAILS

### I. **Organization and Scope of the Program**

#### a.. **Inspection Scope**

The inspector assessed whether Connecticut Yankee personnel were operating and maintaining ISFSI programs at an AFR ISFSI in conformance with the commitments and requirements contained in the FSAR, SER, CoC, TS, QA program, Connecticut Yankee procedures, and 10 CFR Part 72.

AFR ISFSI facilities, located at sites where loading operations have been completed, are essentially passive operating facilities. The inspector's review was directed towards confirming the ongoing adequacy of the radiation protection, fire protection, emergency preparedness, surveillance, maintenance, environmental monitoring, training, QA, and corrective action programs.

The inspector observed activities, interviewed personnel, and reviewed records and procedures. The inspector also reviewed changes made to Connecticut Yankee's programs and procedures since the last inspection to verify that changes were consistent with the license or CoC and did not reduce the effectiveness of the program.

#### b. **Observations**

The inspector determined that Connecticut Yankee's plans and preparations for controlling radiological activities were effective at meeting 10 CFR Part 20 requirements. The inspector also verified that special nuclear material (SNM) stored at the ISFSI was properly accounted for. Dosimetry records and environmental monitoring reports were reviewed. All employees were below the regulatory dose limits and the dose requirements for members of the public at the nearest accessible location to the ISFSI were within limits prescribed by 10 CFR 72.104.

Connecticut Yankee's emergency preparedness program properly coordinated with the appropriate offsite support groups, agencies, and local law enforcement agencies. The emergency call list was current and checked periodically for accuracy. All revisions to the emergency plan have been submitted to the NRC and reviewed by the Office of Nuclear Security and Incident Response.

Daily temperature monitoring of the vertical concrete casks (VCCs) was performed by Connecticut Yankee personnel in accordance with surveillance requirements in the TS. Connecticut Yankee's procedures contain backup plans if the primary surveillance method was unavailable. The inspector performed a tour of the ISFSI pad and observed previous pad repairs to assess their material condition. The inspector did not note any significant material condition issues that would impact the performance of the pad and loaded VCCs. The inspector also verified that transient combustibles were not being stored on the ISFSI pad or in the vicinity of the VCCs and confirmed vehicle entry onto the ISFSI pad was controlled in accordance with site procedures.

Connecticut Yankee has a training program which consists of classroom and on-the-job training, as well as briefings performed by supervisors. Refresher training was given on a regular basis and retraining was given as necessary if human performance issues were identified. All employees have been trained and qualified to perform their assigned ISFSI-related functions.

The inspector reviewed the most recent independent audit of the ISFSI program. The inspector determined that issues were entered into the corrective action program, prioritized, and evaluated commensurate with their safety significance. Corrective actions were implemented to address identified issues and were tracked to closure. The QA program evaluated changes in the ISFSI program to ensure that any changes that were implemented would not decrease the overall effectiveness of the program. The inspector also reviewed Connecticut Yankee's 10 CFR 72.212 evaluation report and ensured it was being appropriately updated.

c. Findings

Based on the results of this inspection, no findings of significance were identified.

**II. Exit Meeting Summary**

On April 21, 2016, the inspector presented the inspection results to Robert Mitchell, Connecticut Yankee Site Manager and other Connecticut Yankee personnel.

## **SUPPLEMENTAL INFORMATION**

### **PARTIAL LIST OF PERSONS CONTACTED**

#### Licensee

J. Bourassa, RPM/QA Representative  
S. Day, Licensing Engineer  
F. DeBuono, Maintenance Supervisor  
R. Desmarais, ISFSI Technical Specialist  
N. Fales, Aging Management, Program Manager  
S. Hemingway, ISFSI Ops Specialist  
J. Lenois, 3 Yankee Security Program Manager  
A. Marino, ISFSI Shift Supervisor  
R. Mitchell, ISFSI Manager  
P. Plante, Cask Relicensing, Project Manager  
J. Williams, ISFSI Shift Supervisor  
J. Wilson, ISFSI Shift Supervisor

### **ITEMS OPEN, CLOSED, AND DISCUSSED**

None

### **LIST OF DOCUMENTS REVIEWED**

#### Audits and Reports

CY ISFSI 10 CFR 72.212 Evaluation Report, Rev. 9, December 2015  
CY Quality Assurance Audit Report CY-16-A03-01 ISFSI Operations Audit, March 9, 2016  
CY Independent Management Assessment and Biennial Safety Culture Assessment Report,  
November 2015

#### Condition Reports

2014-021, 022, 2015-001, 002, 013, 027, 037, 045, 051, 097, 115, 124, 2016-003, 015

#### Miscellaneous

CY Revision 13 to the Haddam Neck Plant ISFSI Emergency Plan, December 1, 2015  
CY Quality Assurance Program for the Haddam Neck ISFSI, Rev. 13, November 17, 2015  
CY Biennial Update to the Haddam Neck Plant License Termination Plan, December 1, 2015  
CY Biennial Update to the Haddam Neck Plant Updated Final Safety Analysis Report, December  
1, 2015  
CY ISFSI Inlet Screen Dose Rate Survey, December 3, 2015

#### Procedures

EF-3, Rev. 7, Special Nuclear Material and Greater than Class C Waste Control, Accountability,  
and Reporting Program, February 17, 2015  
EO-5, Rev. 11, Emergency Planning Implementation  
FP-1, Rev. 5, Fire Protection Program

Procedures (Cont'd)

FP-2, Rev. 4, Fire Hazard Analysis  
OP-1, Rev. 8, Concrete Cask Heat Removal System Surveillance System  
OP-5, Rev. 4, VCC and Related Concrete and Coating Repairs  
OP-7, Rev. 4, VCC and ISFSI Pad Inspection Program  
OP-9, Rev. 4, ISFSI Pad Repair Program  
RP-1, Rev. 4, ISFSI Conduct of Radiation Protection  
RP-2, Rev. 11, Radiological Surveys and Postings  
RP-3, Rev. 11, Radiological Environmental Monitoring Program (REMP)

**LIST OF ACRONYMS USED**

AFR	Away-From-Reactor
CFR	Code of Federal Regulations
CoC	Certificate of Compliance
Connecticut Yankee Atomic Power Company	Connecticut Yankee
CY	Connecticut Yankee
FSAR	Final Safety Analysis Report
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
QA	Quality Assurance
SER	Safety Evaluation Report
SNM	Special Nuclear Material
TS	Technical Specification
VCC	Vertical Concrete Cask