



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

August 22, 2013

Docket No. 07200039

License No. SFGL-21

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

SUBJECT: NRC INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION  
REPORT NO. 07200039/2013001, CONNECTICUT YANKEE ATOMIC POWER  
COMPANY, EAST HAMPTON, CONNECTICUT SITE

Dear Mr. Buerger:

An announced safety inspection was conducted at Connecticut Yankee Atomic Power Company (CY) on June 18 and 19, 2013. An in-office review of additional information provided by CY continued through August 12, 2013. The inspection reviewed CY's activities associated with repairs to the ISFSI concrete pad due to delamination of its surface. The inspection was an examination of your licensed activities as they relate to safety and compliance with the Commission's regulations and with the conditions of your license. The inspectors observed activities, interviewed personnel, and reviewed records and procedures. The results of the inspection were discussed with you at the conclusion of the inspection on August 12, 2013, and are described in the enclosed report.

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

In accordance with 10 CFR Part 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

B. Buerger

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Thank you for your cooperation during this inspection.

Sincerely,

***Original signed by Marc S. Ferdas***

Marc S. Ferdas, Chief  
Decommissioning Branch  
Division of Nuclear Materials Safety

Enclosure:  
Inspection Report No. 07200039/2013001

cc w/encl:  
W. Norton, President and Chief Executive Officer  
C. Pizzella, Treasurer  
R. Capstick, Communications Manager  
J. Connell, RSO  
J. Fay, General Counsel  
State of Connecticut

B. Buerger

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J. Fay, General Counsel  
State of Connecticut

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U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Inspection No. 07200039/2013001  
Docket No. 07200039  
License No. SFGL-21  
Licensee: Connecticut Yankee Atomic Power Company (CY)  
Location: 362 Injun Hollow Road  
East Hampton, CT 06424  
Inspection Dates: June 18 and 19, 2013 (On-Site)  
June 29 to August 12, 2013 (In-Office Review)  
August 12, 2013 (Telephone Exit Meeting)  
Inspectors: Stephen Hammann, Senior Health Physicist  
Decommissioning Branch  
Division of Nuclear Materials Safety  
Suresh Chaudhary, Reactor Inspector  
Engineering Branch 1  
Division of Reactor Safety  
Approved By: Marc S. Ferdas, Chief  
Decommissioning Branch  
Division of Nuclear Materials Safety

Enclosure

**EXECUTIVE SUMMARY**

Connecticut Yankee Atomic Power Company  
NRC Inspection Report No. 07200039/2013001

An announced safety inspection was conducted at CY on June 18 and 19, 2013. An in-office review of additional information provided by CY continued through August 12, 2013. The inspection reviewed CY's activities associated with repairs to the Independent Spent Fuel Storage Installation (ISFSI) concrete pad due to delamination of its surface. The inspectors assessed whether repairs to the ISFSI concrete pad were 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, CY procedures, and 10 CFR Part 72. The inspectors observed activities, interviewed personnel, and reviewed procedures and work plans. Based on the results of this inspection, no findings were identified.

## **REPORT DETAILS**

### a. Inspection Scope (Inspection Procedure (IP) 60858)

An announced safety inspection was conducted at CY on June 18 and 19, 2013. An in-office review of additional information provided by CY continued through August 12, 2013. The inspection reviewed CY's activities associated with repairs to the ISFSI concrete pad due to delamination of its surface. The inspectors assessed whether repairs to the ISFSI concrete pad were 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, CY procedures, and 10 CFR Part 72. The inspection consisted of observations by the inspectors, interviews with CY and contractor personnel, and review of procedures and work plans related to the concrete pad repairs.

The inspectors reviewed CY's evaluation that assessed operability of the ISFSI pad and the causes for the delamination of the ISFSI pad surface. The inspectors reviewed CY's 10 CFR 72.48 and 10 CFR 50.59 screenings; and their ISFSI pad repair work plan. The inspectors reviewed CY's QA inspection results that were conducted during the repair of the ISFSI pad. The inspectors also reviewed the radiological controls put in-place by CY during the repair activities, including assessing compliance with the radiation work permit (RWP).

### b. Observations and Findings

CY determined that the delamination of the ISFSI concrete pad was due to the application of a hard steel trowel surface finish to an air-entrained concrete mixture during initial pad construction. CY also concluded that the delamination was not an immediate reliability or structural issue (rebar has not been impacted) and that the pad remained operable. The inspectors verified that repair activities were performed in accordance with the procedures and work plan developed by CY. Radiological activities were controlled during pad repairs in accordance with CY procedures and the RWP.

### c. Conclusions

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

## **Exit Meeting Summary**

The inspection results were discussed with Brantley Buerger, ISFSI Manager, on August 12, 2013, at the conclusion of the in-office review of information provided by CY.

Enclosure

**SUPPLEMENTAL INFORMATION**

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee

B. Buerger, ISFSI Manager  
S. Hemmingway, ISFSI Specialist  
J. Wilson, QA Manager

**ITEMS OPEN, CLOSED, AND DISCUSSED**

None

**LIST OF DOCUMENTS REVIEWED**

500-V00-SGHI-0001-001, Investigation of Surface Delamination in Exterior Structural Concrete Slab Connecticut Yankee Nuclear Power Plant prepared by Simpson Gumpertz & Heger Inc.  
AD-9, Rev. 4, ISFSI 10 CFR 50.59 and 10 CFR 50.82 Processes, 10 CFR 50.59 and 10 CFR 50.82 Screen Forms  
AD-10, Rev. 7, ISFSI 10 CFR 72.48 Determinations, 10 CFR 72.48 Screen Forms  
AD-14, Rev. 2, Receipt Inspection, Storage and Control of Purchased Material, Equipment and Services, Attachment 1, Receipt Inspection Checklist for Items  
CY-TE-13-01, Assessment of Pad Repairs 2013  
Connecticut Yankee, Memo to File, Operability Determination for Delamination of the Concrete Surface  
Connecticut Yankee, Memo to File, QA Receipt Inspection of Material for the ISFSI Pad Test Repair  
OP-9, Rev. 0, ISFSI Pad Repair Program  
Pad Repair: 10-61 Manufacturer's Instructions  
Pad Repair Phase 1: Readiness Assessment  
RP-2, Rev.7, Attachments 1 and 3, Survey Maps  
RP-2, Rev.7, Attachment 8, Instrument Performance Test Data  
RWP-2013-03  
Work Order 7079, ISFSI Pad Repair

**LIST OF ACRONYMS USED**

CoC	Certificate of Compliance
CY	Connecticut Yankee Atomic Power Company
FSAR	Final Safety Analysis Report
ISFSI	Independent Spent Fuel Storage Installation
QA	Quality Assurance
RWP	Radiation Work Permit
SER	Safety Evaluation Report
TS	Technical Specifications

Enclosure