



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

May 30, 2018

Brian Smith
Site Manager
Yankee Atomic Electric Company
49 Yankee Road
Rowe, MA 01367

**SUBJECT: NRC INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION
REPORT NOS. 07200031/2018001 AND 05000029/2018001, YANKEE ATOMIC
ELECTRIC COMPANY, ROWE, MASSACHUSETTS SITE**

Dear Mr. Smith:

On May 2, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed a safety inspection of the Yankee Atomic Electric Company (Yankee Rowe) 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 inspectors, 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, 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; 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; 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).

No reply to this letter is required. Please contact Orysia Masnyk Bailey at 864-427-1032 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, with the first name being the most prominent.

Raymond J. Powell, Chief
Decommissioning, ISFSI, and Reactor HP
Branch
Division of Nuclear Materials Safety

Dockets Nos.: 07200031, 05000029
License Nos.: SFGL-13, DPR-3

Enclosure:
Inspection Report Nos. 07200031/2018001 and 05000029/2018001

cc w/Encl: Commonwealth of Massachusetts

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection Nos. 07200031/2018001 and 05000029/2018001

Docket Nos. 07200031 and 05000029

License Nos. SFGL-13 and DPR-3

Licensee: Yankee Atomic Electric Company

Location: 49 Yankee Road
Rowe, MA

Inspection Dates: May 2, 2018

Inspectors: Orysia Masnyk Bailey
Health Physicist
Decommissioning, ISFSI, and Reactor HP Branch
Division of Nuclear Materials Safety

Katherine Warner
Health Physicist
Decommissioning, ISFSI, and Reactor HP Branch
Division of Nuclear Materials Safety

Approved By: Raymond J. Powell, Chief
Decommissioning, ISFSI, and Reactor HP Branch
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Yankee Atomic Electric Company
NRC Inspection Report Nos. 07200031/2018001 and 05000029/2018001

An announced safety inspection was conducted on May 2, 2018, at the Yankee Atomic Electric Company (Yankee Rowe) Independent Spent Fuel Storage Installation (ISFSI). The inspector assessed whether Yankee Rowe 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, Yankee Rowe procedures, and 10 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 Radiation Safety Program

A. Inspection Scope

The inspectors assessed whether Yankee Rowe 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, Yankee Rowe procedures, and 10 CFR Part 72.

AFR ISFSI facilities, located at sites where loading operations have been completed, are essentially passive operating facilities. The inspectors' 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 inspectors observed activities, interviewed personnel, and reviewed records and procedures. The inspectors also reviewed changes made to Yankee Rowe'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 inspectors determined that Yankee Rowe's plans and preparations for controlling radiological activities were effective at meeting 10 CFR Part 20 requirements. The inspectors 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 dose to members of the public at the nearest accessible location to the ISFSI were within limits prescribed by 10 CFR 72.104.

Yankee Rowe's emergency preparedness program properly coordinated with the appropriate offsite support groups, agencies, and local law enforcement agencies (LLEAs). 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 (NSIR).

Daily temperature monitoring of the vertical concrete casks (VCCs) was performed by Yankee Rowe personnel in accordance with surveillance requirements in the TS. Yankee Rowe's procedures contain backup plans if the primary surveillance method was unavailable. The inspectors performed a tour of the ISFSI pad and did not note any significant material condition issues that would impact the performance of the pad and loaded VCCs. The inspectors 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.

Yankee Rowe 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 inspectors reviewed the most recent independent audit of the ISFSI program. The inspectors 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 inspectors also reviewed Yankee Rowe'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 May 2, 2018, the inspectors presented the inspection results to Brian Smith, Yankee Rowe Site Manager and other Yankee Rowe personnel.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Bourassa, RPM/QA Representative
 S. Day, Licensing Engineer
 J. Kenneday, ISFSI Shift Supervisor
 K. Kuzontkoski, G4S Project Manager
 C. Lannon, G4S Assistant Project Manager
 J. Lenois, Security Program Manager
 K. Shea, ISFSI Technical Specialist
 B. Smith, Site Manager
 D. Yorke, Operations Specialist

ITEMS OPEN, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Audits and Reports

10 CFR 72.212 Report, Rev. 11
 Documentation of the Completion of the Integrated 3 Yankees Annual Radiation Protection Program Review
 6/28/2016 Annual Survey and REMP TLD Annual Change Out
 June RP Survey
 ISFSI Pad Repair Survey
 Special CY VCC Outlet Vent Survey
 CY 16-0292016 SNM Inventory to Standish Technologies
 CY 2016 SNM Inventory
 CY 2017 SNM Inventory
 ISFSI 16-093, Documentation of the Completed Integrated 3 Yankees Annual Radiation Protection Program Review
 ISFSI 17-088 Self-Assessment for the Radiation Protection Program
 2017 Pad Inspection
 2017 VCC Inspection
 2017 CY ISFSI management Assessment
 Emergency Plan, Rev. 13

Miscellaneous

2018 Radiation Work Permit, December 21, 2017
 Offsite Dose Calculation, Rev. 25, December 11, 2014

Procedures

EF-3, Rev. 9, Special Nuclear Material and Greater than Class C Waste Control, Accountability, and Reporting Program, September 2, 2018
 CY- RCM-0082, Rev. 2, Fire Protection Program
 EO-1, Rev. 15, Emergency Planning Implementation

FP-1, Rev. 5, ISFSI Fire Protection Program
 FP-2, Rev. 5, Fire Hazard Analysis
 FP-3, Rev. 10, Fire Fighting Pre-Plans
 FP-4, Rev. 8, ISFSI Fires and Fire Alarms
 OP-1, Rev. 11, Concrete Cask Removal System Surveillance Program
 OP-2, Rev. 12, Routine Surveillances
 OP-7, Rev. 5, ISFSI Annual Inspection Program
 RP-1, Rev. 5, Conduct of Radiation Protection
 RP-2, Rev. 14, Radiological Surveys and Postings
 RP-4, Rev. 11, Personal Radiation Monitoring
 RP-5, Rev. 7, Radiation Work Permits

LIST OF ACRONYMS USED

AFR	Away-From-Reactor
CFR	Code of Federal Regulations
CoC	Certificate of Compliance
FSAR	Final Safety Analysis Report
IP	Inspection Procedure
ISFSI	Independent Spent Fuel Storage Installation
LLEA	Local Law Enforcement Agencies
NSIR	Office of Nuclear Security and Incident Response
QA	Quality Assurance
SER	Safety Evaluation Report
SNM	Special Nuclear Material
TS	Technical Specification
VCC	Vertical Concrete Cask
YAEC	Yankee Atomic Electric Company
YR	Yankee Rowe