



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

May 30, 2018

J. Stanley Brown
ISFSI Manager
Maine Yankee Atomic Power Company
321 Old Ferry Road
Wiscasset, ME 04578

**SUBJECT: NRC INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION
REPORT NOS. 07200030/2018001 AND 05000309/2018001, MAINE YANKEE
ATOMIC POWER COMPANY, WISCASSET, MAINE SITE**

Dear Mr. Brown:

On May 1, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed a safety inspection of the Maine Yankee Atomic Power Company (Maine 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 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, written in a professional style.

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

Dockets Nos.: 07200030, 05000309
License Nos.: SFGL-14, DPR-36

Enclosure:
Inspection Report Nos. 07200030/2018001 and 05000309/2018001

cc w/Encl: Pat Dostie, State Nuclear Engineer
State of Maine

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection Nos. 07200030/2018001 and 05000309/2018001

Docket Nos. 07200030 and 05000309

License Nos. DPR-36 and SFGL-14

Licensee: Maine Yankee Atomic Power Company

Location: 321 Old Ferry Road
Wiscasset, ME 04578

Inspection Dates: May 1, 2018, 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

Maine Yankee Atomic Power Company
NRC Inspection Report Nos. 07200030/2018001 and 05000309/2018001

An announced safety inspection was conducted on May 1, 2018, at the Maine Yankee Atomic Power Company (Maine Yankee) Independent Spent Fuel Storage Installation (ISFSI). The inspectors assessed whether Maine 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, Maine Yankee procedures, and 10 CFR Part 72. The inspectors' 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 inspectors 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 Maine 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, Maine 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 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 Maine 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 inspectors determined that Maine 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 to members of the public at the nearest accessible location to the ISFSI were within limits prescribed by 10 CFR 72.104.

Maine Yankee'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 Maine Yankee personnel in accordance with surveillance requirements in the TS. Maine Yankee'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.

Maine 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 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 inspector also reviewed Maine 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 May 1, 2018, the inspectors presented the inspection results to J. Stanley Brown, ISFSI Manager and other Maine Yankee personnel.

SUPPLEMENTAL INFORMATION**PARTIAL LIST OF PERSONS CONTACTED**

M. Atwood, Shift Supervisor
 A. Blake, Facilities Specialist
 J. Bourassa, RPM/QA Representative
 J. Stanley Brown, ISFSI Manager
 S. Day, Licensing Engineer
 P. Dostle, Maine Nuclear Safety Inspector
 L. Doucette, Technical Specialist
 P. Fitzmaurice, Security Project Manager
 J. Lenois, 3 Yankee Security Program Manager
 D. Mercer, Operations Specialist
 J. Miller, ISFSI Security Supervisor
 R. Mitchell, Assistant Director of Operations

ITEMS OPEN, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWEDAudits and Reports

2016 June Approved RP Survey
 2017 June Approved RP Survey
 2017 VCC Vent Screen Approved Survey
 Neutron Survey June 2013
 MY Quality Assurance Program for the MY ISFSI, Rev. 36, December 2015
 Annual Special Nuclear Material (SNM) Report for 2017, 8/24/2017

Miscellaneous

RWP 2018-01, 02, and 03, `12/11/2017
 Continuous Improvement Plan
 Integrated Improvement Plan
 Maine Yankee Quality Assurance Audit No. MY-18-A05-01, 4/26/2018
 MY ISFSI Off-Site Dose Calculation Manual, Change No. 36, December 3, 2014
 MY- RCM-003, Rev. 2, Radiation Protection Program, February 10, 2015
 MY- RCM-014, Rev. 0, Radwaste Management/Radioactive Shipment, September 15, 2011
 MY- RCM-021, Rev. 1, Offsite Dose Calculation Manual, February 10, 2015
 MY- RCM-022, Rev. 0, Special Nuclear Materials Accountability, November 10, 2011
 MY- RCM-030, Rev. 2, GTCC Waste Storage, January 21, 2016
 Quality Assurance Program for the MY ISFSI, Rev. 36, December 16, 2015
 Work Order 17-086 Replace al fuel VCC inlet screens

Procedures

EF-3, Rev. 4, Special Nuclear Material and Greater than Class C Waste Control, Accountability, and Reporting Program
 FP-1, Rev. 10, ISFSI Fire Protection Program
 FP-2, Rev. 9, Fire Hazards Analysis
 FP-3, Rev. 10, ISFSI Fire Fighting Preplan
 FP-4, Rev. 6, ISFSI Fires and Fire Alarms

FP-5, Rev. 8, Hot Work and Combustible Controls
 FP-6, Rev. 17, Fire System Surveillance
 Fp-7, Rev. 3, ISFSI Fire Protection System
 QA-2, Quality Assurance
 RP-1, Rev. 4, Conduct of Radiation Protection
 RP-2, Rev. 15, Radiological Surveys and Postings
 RP-3, Rev. 6, ISFSI Radiological Environmental Monitoring Program
 RP-4, Rev. 7, Personnel Radiation Monitoring
 RP-5, Rev. 3, 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
MY	Maine Yankee Atomic Power Company
Maine Yankee	Maine Yankee Atomic Power Company
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