



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

May 6, 2014

Docket Nos. 07200030
05000309

License No. DPR-36

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 NO. 07200030/2014001, MAINE YANKEE ATOMIC POWER
COMPANY, WISCASSET, MAINE SITE**

Dear Mr. Brown:

On April 16, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of 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 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; and are described in the enclosed report. No findings of significance 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, 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).

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 individuals 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 Steve Hammann at 610-337-5399 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in blue ink that reads "Katy Modes". To the left of the signature, the word "for" is written in a cursive script.

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

cc:
Ed Polewarczyk, Chair, Board of Selectmen
Jay Hyland, P.E., Manager, Radiation Control Program
Pat Dostie, State Nuclear Safety Inspector

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No. 07200030/2014001
Docket Nos. 07200030 and 05000309
License No. DPR-36
Licensee: Maine Yankee Atomic Power Company
Location: 321 Old Ferry Road
Wiscasset, ME 04578
Inspection Dates: April 16, 2014
Inspectors: Stephen Hammann, Senior Health Physicist
Decommissioning and Technical
Support Branch
Division of Nuclear Materials Safety
Approved By: Marc S. Ferdas, Chief
Decommissioning and Technical
Support Branch
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Maine Yankee Atomic Power Company
NRC Inspection Report No. 07200030/2014001

An announced safety inspection was conducted on April 16, 2014, at the Maine Yankee Atomic Power Company (Maine Yankee) Independent Spent Fuel Storage Installation (ISFSI). The inspector 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 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 Program

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

The inspector 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 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 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 and Findings

The inspector 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 requirements for 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).

Maine Yankee identified that since 2008 it did not submit Emergency Plan implementing procedures after changes were made as required by 10 CFR 50.4(b)(5)(iii). Maine Yankee also identified that they did not perform an annual independent assessment of the emergency preparedness program in 2013 as required by 10 CFR 50.54(t)(1)(i). Both of these issues were entered into Maine Yankee's corrective action program and the inspector verified that appropriate corrective actions were taken to address the issues. The inspector determined that none of the changes to their Emergency Plan implementing procedures were significant and did not decrease the effectiveness of their program. In addition, Maine Yankee's 2014 independent assessment of the emergency preparedness program did not identify any significant issues that existed in 2013 that would have resulted in the licensee not being able to implement its emergency

preparedness program. These failures constitute violations of minor significance and are not subject to formal enforcement action.

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 inspector 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 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.

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 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 Maine Yankee's 10 CFR 72.212 evaluation report and ensured it was being appropriately updated.

c. Conclusions

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

II. Exit Meeting Summary

On April 16, 2014, the inspector presented the inspection results to J. Stanley Brown, ISFSI Manager. The inspector confirmed that proprietary information was not provided or examined during the inspection.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Stanley Brown, ISFSI Manager
J. Connell, RPM
S. Day, Licensing Engineer
L. Jewett, ISFSI Specialist
J. Lenois, ISFSI Security Program Manager
J. Miller, ISFSI Security Supervisor
F. Senence, Training Coordinator
P. Woodham, Programs Manager

ITEMS OPEN, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Audits and Reports

Annual Radioactive Effluent Release Report 2013
Annual Radiological Environmental Operating Report 2013
MY-12-A05-01, Maine Yankee ISFSI Operations Audit 2012
MY ISFSI-14032, 2014 Emergency Plan Independent Assessment
ISFSI Memo 13-007, 2012 Condition Report Trending Analysis
ISFSI Memo 14-007, 2013 Condition Report Course Code Trend Review

Condition Reports

2012-035, 045, 049, 058, 063, 076, 112, 153, 159
2013-033, 066, 077, 109
2014-028

Miscellaneous

ISFSI Memo 12-064: Training Assessment
Maine Yankee Independent Spent Fuel Storage Installation Emergency Plan, Rev. 4
MY-14-037, Revisions to Maine Yankee ISFSI Emergency Plan Implementing Procedures
RP-2, Rev. 6, Attachment A, ISFSI Routine Surveys 12/2013
RWP 2014-01, Rev. 0
RWP 2014-02, Rev. 0

Procedures

AD-15, Rev. 1, ISFSI Surveillance and Reporting Program
AD-16, Rev. 6, Training and Qualifications
FP-3, Rev. 5, ISFSI Fire Fighting Preplan
FP-4, Rev. 3, ISFSI Fires and Fire Alarms
EO-1, Rev. 5, Emergency Planning Administration

EO-5, Rev. 7, Emergency Plan Implementation
OP-9, Rev. 9, ISFSI Logs
RP-2, Rev. 7, Radiological Surveys and Postings
RP-3, Rev. 3, ISFSI Radiological Environmental Monitoring Program (REMP)

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
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