

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19406-2713

May 18, 2016

Docket Nos. 07200030

05000309

License Nos.

SFGL-14

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 NOS. 07200030/2016001 AND 05000309/2016001, MAINE YANKEE

ATOMIC POWER COMPANY, WISCASSET, MAINE SITE

Dear Mr. Brown:

On April 19, 2016, 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 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; 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 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.

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

Sincerely,

Raymond J. Powell, Chief

Decommissioning and Technical

Support Branch

Division of Nuclear Materials Safety

Enclosure:

Inspection Report No. 07200030/2016001

cc:

Jay Hyland, Manager

Pat Dostie, State Nuclear Engineer

State of Maine

U.S. NUCLEAR REGULATORY COMMISSION REGION I

INSPECTION REPORT

Inspection No.

07200030/2016001

Docket Nos.

07200030 and 05000309

License Nos.

SFGL-14 and DPR-36

Licensee:

Maine Yankee Atomic Power Company

Location:

321 Old Ferry Road Wiscasset, ME 04578

Inspection Dates:

April 19, 2016

Inspector:

John Nicholson

Senior 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

Maine Yankee Atomic Power Company NRC Inspection Report No. 07200030/2016001

An announced safety inspection was conducted on April 19, 2016, 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 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 Radiation Safety Program

a. Inspection Scope

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

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. 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 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. Findings

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

II. Exit Meeting Summary

On April 19, 2016, the inspector presented the inspection results to J. Stanley Brown, ISFSI Manager and other Maine Yankee personnel.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- J. Bourassa, RPM/QA Representative
- J. Stanley Brown, ISFSI Manager
- B. Capstick, Director, Regulatory Affairs
- S. Day, Licensing Engineer
- N. Fales, Aging Management, Program Manager
- L. Jewett, ISFSI Specialist
- J. Lenois, 3 Yankee Security Program Manager
- D. Mercer, Operations Specialist
- J. Miller, ISFSI Security Supervisor
- W. Norton, Chief Nuclear Officer
- P. Plante, Cask Relicensing, Project Manager

ITEMS OPEN. CLOSED. AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Audits and Reports

Independent Management Assessment and Biennial Safety Culture Assessment Report
November 2015

MY 2015 Emergency Plan Independent Assessment

MY 2015 ISFSI Fire Protection Program Review

MY ISFSI, Annual Radioactive Effluent Release Report, January - December 2014

MY ISFSI, Annual Radiological Environmental Operating Report 2014

MY ISFSI, Annual Radiological Environmental Operating Report 2015

MY Defueled Safety Analysis Report Rev. 28, September 29, 2015

MY Post-Shutdown Decommissioning Activities Report, Rev. 3 January 2016

Condition Reports

2014-010, 027, 028, 029, 078, 124, 165, 176, 2015-011, 013, 014, 025, 037, 041, 061, 077, 2016-013, 016, 017, 031, 036, 038, 073

<u>Miscellaneous</u>

MY 2015 VCC Inspection Tracking Form

MY GTCC Decay Calculation, Technical Support Document No. 16-018 Rev.00

MY ISFSI 10 CFR 72.212 Evaluation Rev. 5, December 2013

MY ISFSI Annual Routine Survey June 30, 2015

MY ISFSI Off-Site Dose Calculation Manual, Change No. 36, December 3, 2014

MY ISFSI Temperature Monitoring Log December 2015

Enclosure

Miscellaneous Cont'd

MY ISFSI VCC Inlet Port Radiation Survey, December 7, 2015

MY Regulatory Compliance Matrix Radiation Protection Program, Rev. 2 February 2015

MY Special Nuclear Material Inventory 2015

Quality Assurance Program for the MY ISFSI, Rev. 36, December 16, 2015

Revision 5 to Maine Yankee ISFSI Emergency Plan, July 28, 2015

Revision 6 to Maine Yankee ISFSI Emergency Plan, September 2, 2015

Revision 7 to Maine Yankee ISFSI Emergency Plan, December 15, 2015

Procedures

AD-15, Rev. 1, ISFSI Surveillance and Reporting Program

AD-16, Rev. 6, Training and Qualifications

EF-3, Rev. 4, Special Nuclear Material and Greater than Class C Waste Control, Accountability, and Reporting Program

EO-1, Rev. 8, Emergency Planning Administration

EO-5, Rev. 10, Emergency Plan Implementation

FP-1, Rev. 9, ISFSI Fire Protection Program

FP-3. Rev. 9, ISFSI Fire Fighting Preplan

FP-4, Rev. 4, ISFSI Fires and Fire Alarms

OP-1, Rev. 5, Concrete Cask Heat Removal System Surveillance Program

OP-7, Rev. 2, VCC and ISFSI Pad Annual Inspection Program

RP-1, Rev. 4, Conduct of Radiation Protection

RP-2, Rev. 12, Radiological Surveys and Postings

RP-3, Rev. 6, ISFSI Radiological Environmental Monitoring Program

RP-4. Rev. 6. Personnel Radiation Monitoring

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
MY Maine Yankee Atomic Power Company
Maine Yankee Atomic Power Company

QA Quality Assurance

SER Safety Evaluation Report
TS Technical Specification
VCC Vertical Concrete Cask