

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

October 17, 2018

10-25-2018

NV4 18-022

Corey Daniels Director, Nuclear Decommissioning Vermont Yankee Nuclear Power Station 320 Governor Hunt Road Vernon, VT 05354

SUBJECT: NRC INSPECTION REPORT NO. 05000271/2018003, ENTERGY NUCLEAR OPERATIONS, INC., VERMONT YANKEE NUCLEAR POWER STATION, VERNON, VERMONT

Dear Mr. Daniels:

On October 1-4, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an on-site inspection under Inspection Manual Chapter 2561, "Decommissioning Power Reactor Inspection Program," at the permanently shutdown Vermont Yankee Nuclear Power Station (VY). The inspector examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of observations by the inspector, interviews with personnel, and a review of procedures and records. The results of the inspection were discussed with you and other members of the VY staff on October 4, 2018, and are described in the enclosed report. No findings of safety 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 <u>www.nrc.gov</u>; select **Radioactive Waste**; **Decommissioning of Nuclear Facilities**; then **Regulations**, **Guidance and Communications**. The current Enforcement Policy is included on the NRC's Website at <u>www.nrc.gov</u>; 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).

C. Daniels

No reply to this letter is required. Please contact Steve Hammann at 610-337-5399 if you have any questions regarding this matter.

Sincerely,

1

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

Docket No. 05000271 License No. DPR-28

Enclosure: Inspection Report 05000271/2018003 w/Attachment

cc w/encl: Distribution via ListServ

U.S. NUCLEAR REGULATORY COMMISSION REGION I

INSPECTION REPORT

Inspection No.	05000271/2018003
Docket No.	05000271
License No.	DPR-28
Licensee:	Entergy Nuclear Operations, Inc. (Entergy)
Facility:	Vermont Yankee Nuclear Power Station (VY)
Location:	Vernon, VT 05354
Inspection Dates:	October 1-4, 2018
Inspector:	Stephen Hammann, Senior Health Physicist Decommissioning, ISFSI, and Reactor Health Physics Branch Division of Nuclear Materials Safety, Region I
Approved By:	Raymond Powell, Chief Decommissioning, ISFSI, and Reactor Health Physics Branch Division of Nuclear Materials Safety, Region I

EXECUTIVE SUMMARY

Entergy Nuclear Operations, Inc. Vermont Yankee Nuclear Power Station NRC Inspection Report No. 05000271/2018003

An announced VY on-site decommissioning inspection was performed October 1-4, 2018. The inspection included a review of organization and management; safety reviews and mods; and audits and the corrective action program. The inspection consisted of observations by the inspector, interviews with Entergy personnel, a review of procedures and records, and plant walkdowns. The NRC's program for overseeing the safe operation of a shutdown nuclear power reactor is described in Inspection Manual Chapter (IMC) 2561, "Decommissioning Power Reactor Inspection Program."

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

REPORT DETAILS

1.0 Background

On January 12, 2015, VY certified the permanent removal of fuel from the reactor vessel [Agencywide Document and Access Management System (ADAMS) Accession No. ML15013A426]. This met the requirements of 10 Code of Federal Regulations (CFR) 50.82(a)(1)(i) and 50.82(a)(1)(ii). On January 20, 2015, the NRC notified VY that the Operating Reactor Assessment Program would cease on January 24, 2015, and that implementation of the Decommissioning Power Reactor Inspection Program would begin on January 25, 2015 (ADAMS Accession No. ML15020A482). VY is currently in the SAFSTOR phase of decommissioning as described in IMC 2561.

2.0 SAFSTOR Performance and Status Review

a. Inspection Scope [Inspection Procedures (IPs) 36801, 37801, 40801]

The inspector conducted document reviews and interviewed plant personnel to verify regulatory requirements were properly implemented with respect to the site organization, staffing and qualifications, safety, fire protection, and employee training programs. The inspector reviewed procedures and processes to evaluate Entergy's ability to resolve employee safety concerns, disseminate safety information and effectively resolve identified problems. The inspector reviewed Entergy's decommissioning activities to verify they were performed in a manner consistent with the Post-Shutdown Decommissioning Activities Report (PSDAR).

The inspector conducted document reviews and interviews with plant personnel to verify Entergy procedures and processes conformed to the regulations and guidance associated with 10 CFR 50.59. The inspector also reviewed Entergy's applicability determination process that is used to determine if a 10 CFR 50.59 evaluation is needed and reviewed a sampling of 10 CFR 50.59 screenings. The inspector reviewed the qualification and training for 10 CFR 50.59 evaluators and process applicability determination evaluators. The inspector reviewed meeting minutes for the last Safety Review Committee meeting.

The inspector reviewed documents and interviewed VY personnel to verify Entergy management performed audits and self-assessments, and ensured issues were identified and corrected in accordance with the site's corrective action program (CAP). The inspector reviewed a representative selection of CAP documents to determine if a sufficiently low threshold for problem identification existed, follow-up evaluations were of sufficient quality, and Entergy assigned timely and appropriate prioritization for issue resolution commensurate with the significance of the issue. The inspector reviewed two of the site audits for the past year to verify audits were thorough and corrective actions were initiated if necessary.

b. Observations and Findings

The inspector verified that management oversight was adequate for the SAFSTOR phase of decommissioning and that no significant changes had been made to the VY SAFSTOR organization since the previous inspection. The inspector determined that training programs were being appropriately implemented, workers check their training qualifications weekly via computerized system, and training reports are generated weekly and reviewed by the training coordinator. The inspector determined safety issues are reported to management daily and a weekly report out of all safety issues is reviewed by management. The inspectors noted that site decommissioning activities were in accordance with the PSDAR.

The inspector determined that 10 CFR 50.59 screenings are being performed and that Entergy has trained and qualified individuals to perform the screenings and evaluations. The inspector determined that no changes or modifications under 10 CFR 50.59 were made in the past year.

The inspector determined that issues were being identified and entered into the CAP in a timely manner and the issues were effectively screened, prioritized and evaluated commensurate with their safety significance. The inspector verified audits were being performed by qualified individuals independent of the organization being audited and that management reviewed the audits and associated corrective actions. The inspector verified the Nuclear Independent Oversight organization continues to perform audits and surveillances of decommissioning activities.

c. Conclusions

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

3.0 Exit Meeting Summary

On October 4, 2018, the inspector presented the inspection results to Corey Daniels, Director, Nuclear Decommissioning, and other members of Entergy's staff. The inspector confirmed that proprietary information was not removed from the site.

2 Inspection Report No. 05000302/2018003

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

- G. Bailey, Engineer
- H. Breite, Sr. Lead Engineer
- C. Chappell, Manager Design and Programs
- C. Daniels, Director, Nuclear Decommissioning
- S. Dorval, RP Program Coordinator
- J. Ewell, Senior RP Specialist
- D. Giard, CA&A
- S. Hill, Training Superintendent
- P. Jerz, Senior Manager Production
- J. Laughney, QA Manager
- T. Silko, Lead Licensing Engineer

fire protection person

ITEMS OPEN, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Audits and Reports

Biennial 10 CFR 50.59 Report, September 1, 2015 to September 28, 2017 Quality Assurance Audit Report, QA-4-8-9-2018-VY-1 Quality Assurance Audit Report, QA-13-2018-VY-1

<u>Condition Reports</u> CR-VTY-2018-00087, 00319, 00430, 00433, 00486, 00494, 01046

Procedures and Programs

Quality Assurance Program Manual, Rev. 7 SEP-FP-VTY-003, Vermont Yankee Fire Protection Program, Rev. 3 TDD 1.0 SAFSTOR Systematic Approach to Training (SAT), Rev. 4 V-EN-LI-100, Process Applicability Determination, Rev. 20 V-EN-LI-101, 10 CFR 50.59 Evaluations, Rev. 14 V-EN-LI-102, Corrective Action Program, Rev. 28 V-EN-IS-101, Industrial Safety and Health Program, Rev. 6 V-EN-OM-119, Independent Safety Review, Rev. 17 VY-AD-1, ISFSI Management, Organization, and Responsibilities VY-AD-7, ISFSI Corrective Action Program, Rev. 0 VY-AD-9, ISFSI Regulatory Reviews (Process Applicability Process), Rev. 0 VY-AD-16, Training and Qualifications, Rev. 0p VY-ES-2, ISFSI Health and Safety Program, Rev. 1 VY-FP-1, ISFSI Fire Protection Program, Rev. 0 VY-FP-2, ISFSI Fire Hazards Analysis, Rev. 0 VY QA 1, ISFSI Quality Program Administration, Rev. 0 VY QA 2, ISFSI Quality Assessments, Rev. 0 VY QA 3, Quality Inspection Program, Rev. 0

Miscellaneous Composite Organization 2016-2018, As of 8/21/18 Fire Hazards Analysis, Rev. 19 QA 2018 Audits V-EN-LI-100, Attachment 9.1, EC 75772 V-EN-LI-100, Attachment 9.1, EC 75809 V-EN-LI-100, Attachment 9.1, EC 77498 V-EN-LI-100, Attachment 9.1, EC TRM changes Vermont Yankee Safety Review Committee Meeting 2018-01 Minutes VTY SAFSTOR Training Oversight Committee Minutes, September 12, 2017

LIST OF ACRONYMS USED

ADAMS	Agencywide Document and Access Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
Entergy	Entergy Nuclear Operations, Inc.
IMC	Inspection Manual Chapter
IP	Inspection Procedure
NRC	U.S. Nuclear Regulatory Commission
PSDAR	Post Shutdown Decommissioning Activities Report
VY	Vermont Yankee Nuclear Power Station