

April 10, 2000

Mr. Samuel L. Newton
Vice President, Operations
Vermont Yankee Nuclear Power Corporation
185 Old Ferry Road
P.O. Box 7002
Brattleboro, Vermont 05302-7002

SUBJECT: NRC INTEGRATED INSPECTION REPORT 05000271/2000-001

Dear Mr. Newton:

On February 27, 2000, the NRC completed an inspection at your Vermont Yankee (VY) facility. The enclosed report presents the results of that inspection.

During the six weeks covered by this inspection period, the conduct of activities at Vermont Yankee was characterized by safe plant operations.

However based on the results of this inspection, we have determined that one Severity Level IV violation of NRC requirements occurred. This violation involved a failure to follow the procedure for alignment of the liquid radioactive waste system. Consequently, a portion of the piping was subjected to pressure in excess of its design rating, and water from the torus was inadvertently transferred to the main condenser hotwell. This violation is being treated as Non-Cited violation (NCV), consistent with Section VII.B.1.a of the Enforcement Policy (NUREG 1600, November 1999). If you contest this violation, or the severity level, you should provide a written response within 30 days of the date of this inspection report, with the bases for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region I, the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, and the NRC Resident Inspector at the Vermont Yankee facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practices," a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

Sincerely,

/RA/

Clifford J. Anderson, Chief
Projects Branch 5
Division of Reactor Projects

Enclosure: NRC Inspection Report 05000271/2000-001

Docket No. 050000271

License No. DPR-28

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REGION I

Docket No.	05000271
Licensee No.	DPR-28
Report No.	05000271/2000-001
Licensee:	Vermont Yankee Nuclear Power Corporation
Facility:	Vermont Yankee Nuclear Power Station
Location:	Vernon, Vermont
Dates:	January 17 - February 27, 2000
Inspectors:	Brian J. McDermott, Senior Resident Inspector Edward C. Knutson, Resident Inspector Ronald L. Nimitz, Senior Radiation Specialist
Approved by:	Clifford J. Anderson, Chief Projects Branch 5 Division of Reactor Projects

EXECUTIVE SUMMARY

Vermont Yankee Nuclear Power Station NRC Inspection Report 05000271/2000-001

This integrated inspection included aspects of licensee operations, engineering, maintenance, and plant support. The report covers a six week period of routine resident inspector activities.

Operations

No problems were identified with the status of plant safety systems during control room tours or review of Event Reports (ERs). A sample review of work orders and ERs found that the basis for operability of degraded equipment was adequately evaluated and documented. (Section O1.1)

The fire brigade leader promptly identified the cause of an unexpected fire alarm as steam from a reactor water cleanup pump seal failure. Operators in the control room responded well, and took action to isolate the reactor water cleanup system. There were no significant plant or radiological contamination consequences from this event. (Section O1.2)

Operators failed to restore a radwaste system valve to its normal position, as required by procedures, following the 1999 refueling outage. Consequently, the radwaste system piping was subjected to pressure in excess of its design value and torus water was inadvertent transferred to the main condenser hotwell. A Severity Level IV violation for failure to follow procedures is being treated as a Non-Cited Violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This violation was entered in VY's corrective action program as ER 2000-0001. (Section O1.3)

Maintenance

The sample of routine maintenance and surveillance activities observed during this report period were adequately performed. (Section M1.1)

VY appropriately implemented Maintenance Rule Program requirements for evaluation and classification of a reactor water cleanup pump seal failure that occurred on January 21, 2000. (Section M2.1)

Engineering

VY requested enforcement discretion to eliminate twice-weekly partial closure testing of one main steam isolation valve. The actuator controls for this test had been degrading and presented the risk of an unnecessary plant transient. NRC granted the requested enforcement discretion on February 10, 2000. Quarterly valve testing, required by the Technical Specifications and ASME Code Section XI, demonstrates the valve will perform its intended safety function. (Section E2.1)

Plant Support

Executive Summary (cont'd)

VY established and implemented acceptable radiological controls for repair of the reactor water clean-up pumps. (Section R1.1)

VY implemented acceptable programs in the areas of radioactive waste source evaluation, waste processing and handling, radionuclide scaling factor determination, and waste classification. (Section R1.2)

VY implemented a generally effective radioactive waste and radioactive material packaging and shipping program. (Section R1.3)

VY's waste processing, handling, and storage areas were generally clean and well maintained. However, the lower-level of the radwaste facility exhibited degraded housekeeping conditions and apparent system maintenance. VY placed this matter into its corrective action system (ER 2000-0205). (Section R2)

Overall, radwaste shipping personnel involved in waste shipping activities were provided appropriate training and qualification. VY initiated a self-assessment effort in response to some inconsistencies identified in implementation of the training program. (Section R5)

VY implemented generally effective audits and surveillances of radioactive waste shipping activities. (Section R7)

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ATTACHMENTS

- Attachment 1 - List of Acronyms Used
- Attachment 2 - Items Opened, Closed, or Discussed

Report Details

Summary of Plant Status

Throughout most of the inspection period, the Vermont Yankee (VY) plant was operated at 100 percent power. On February 9, operators reduced power to 72 percent in support of a control rod pattern exchange and main steam isolation valve full closure testing. The plant was returned to full power operation on February 10. On February 23, operators reduced power to 73 percent for maintenance on one control rod hydraulic control unit, and returned the plant to 100 percent power later the same day.

I. Operations

O1 Conduct of Operations¹

O1.1 Observation of Routine Plant Operations (71707)

The inspectors routinely toured the control room to assess the conduct of activities, verify safety system alignments, and verify compliance with Technical Specification (TS) requirements. Equipment deficiencies identified in control room logs were reviewed, and discussed with shift supervision, to evaluate both the equipment condition discussed and the licensee's initial response to the issue.

No problems were identified with the status of plant safety systems during the control room tours or review of Event Reports (ERs). A sample review of work orders and ERs found that the basis for operability of degraded equipment was adequately evaluated and documented.

O1.2 Reactor Water Cleanup (RWCU) Pump Seal Failure

a. Inspection Scope (71707)

On January 20, 2000, a seal on the "A" RWCU pump failed while the pump was in service. The inspector observed the operating crew's response to this event while in the control room.

b. Observations and Findings

The initial indication of the seal failure was a fire alarm in the reactor building. A prompt investigation by the fire brigade leader determined there was a steam leak from the "A" RWCU pump seal and not a fire. Control room operators manually isolated the RWCU system and stopped the steam leak within approximately 10 minutes. There was no significant loss of coolant and area temperatures were only slightly elevated during the event.

Appropriate followup actions were taken to prevent the spread of contamination until Radiation Protection (RP) personnel could survey the area. The "B" RWCU pump was

¹Topical headings such as O1, M8, etc., are used in accordance with the NRC standardized reactor inspection report outline. Individual reports are not expected to address all outline topics.

placed in service later the same day and consequently there was no significant impact on reactor water chemistry from the RWCU system being out of service.

c. Conclusions

The fire brigade leader promptly identified the cause of an unexpected fire alarm as steam from a reactor water cleanup pump seal failure. Operators in the control room responded well, and took action to isolate the reactor water cleanup system. There were no significant plant or radiological contamination consequences from this event.

O1.3 Inadvertent Transfer of Torus Water to the Main Condenser Hotwell

a. Inspection Scope (71707)

On January 4, 2000, operators inadvertently transferred approximately 5500 gallons of water from the torus to the main condenser hotwell. The water was intended to be transferred to a waste surge tank in the radwaste system. The inspector reviewed the licensee's initial response to this event and the potential impact on plant equipment.

b. Observations and Findings

During the 1999 refueling outage, the radwaste system was aligned to support shutdown operations in accordance with procedure OP 2151, "Liquid Radwaste," section D, "Refueling Outage Operation." This procedure directs placement of danger and caution tags on selected valves, while establishing the required system lineup. Not all valves that are operated to establish the shutdown lineup are tagged.

In preparation for startup from an outage, the operations department performs valve lineups on systems that are required to support plant operations. On November 25, 1999, such a valve lineup was completed on the liquid radwaste system. The valves that were still out of their normal positions to support the shutdown system alignment were annotated as such on the valve lineup sheet, as allowed by administrative procedure AP 0155, "Current System Valve and Breaker Lineup and Identification."

On December 8, 1999, the liquid radwaste system shutdown alignment tags were cleared. As with tag placement during system alignment, the clearance of tags during system restoration is also directed by OP 2151. The need to coordinate tag removal with the procedurally directed system restoration had been noted as a comment on the switching and tagging order. However, this note was apparently missed, and system restoration in association with clearing the tags was limited to repositioning those valves that had been tagged. As a result, restoration of the liquid radwaste system from shutdown operation per OP 2151 was not completely performed, and the inlet valve to the waste surge tank, LRW 9313, remained closed.

On January 4, operators initiated actions to transfer water from the torus to the waste surge tank in accordance with OP 2124, "Residual Heat Removal System." The procedure is based on the radwaste system valves being in their normal operating alignment, and only directs operation of those valves necessary to select the desired storage tank. As a result, the flow path between the torus and the waste surge tank was

not complete when the transfer of water was attempted. With LRW 9313 still closed, the RHR pump discharge pressure caused a relief valve in the liquid radwaste system to lift, directing the water to the main condenser hotwell.

Control room operators were alerted to the problem when they received a main condenser high hotwell level alarm. Torus pump down was secured, although it was not immediately obvious that it had anything to do with the hotwell high level. Operators observed small, short term increases in main steam and demineralizer inlet conductivity. After subsequent investigation identified what had happened, chemistry samples verified that there had been no long term effect on reactor water conductivity.

As corrective action, the associated portion of the liquid radwaste system was danger tagged, pending evaluation for potential degradation due to over pressurization. VY Engineering concluded that, although pressure had exceeded the system design pressure, the system had not been over stressed during the event and that there were no associated operability concerns.

Technical Specification 6.4, "Procedures," requires that written procedures for the normal operation of systems and components be established and implemented. VY operating procedure OP 2151, "Liquid Radwaste," requires the waste surge tank inlet valve be opened during restoration of the radwaste system from refueling outage alignment. Contrary to the above, the waste surge tank inlet valve was not opened during restoration of the radwaste system following the 1999 refueling outage. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This violation was entered in VY's corrective action program as ER 2000-0001. **(NCV 05000271/2000-001-01: Radwaste System Alignment not Restored at Completion of 1999 Refueling Outage)**

c. Conclusions

Operators failed to restore a radwaste system valve to its normal position, as required by procedures, following the 1999 refueling outage. Consequently, the radwaste system piping was subjected to pressure in excess of its design value and torus water was inadvertent transferred to the main condenser hotwell. A Severity Level IV violation for failure to follow procedures is being treated as a Non-Cited Violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy (NUREG 1600, November 1999). This violation was entered in VY's corrective action program as ER 2000-0001.

II. Maintenance

M1 Conduct of Maintenance

M1.1 Maintenance and Surveillance Observations

a. Inspection Scope (61726, 62707)

The inspector observed portions of plant maintenance activities to verify the use of approved procedures, appropriate conduct and control of the work, and compliance with regulatory requirements. The inspector also observed portions of surveillance activities to verify proper calibration of test instrumentation, use of approved procedures, conformance to Limiting Conditions for Operations (LCOs). Following the completion of maintenance and surveillance activities, the inspector verified that safety systems were returned to their appropriate standby alignments.

b. Observations and Findings

The inspector observed portions of the in-plant work and reviewed work documents associated with the following activities:

- Replace MG-UPS-1B voltage regulator, WO 99-011693-001, observed January 21
- "A" emergency diesel generator monthly surveillance, observed January 25 and February 22
- Emergency diesel generator fuel oil transfer pump quarterly surveillance, observed January 25
- Standby liquid control system quarterly surveillance, observed February 2
- Residual heat removal (RHR) system and RHR service water system quarterly surveillance, observed February 8

c. Conclusions

The sample of routine maintenance and surveillance activities observed during this report period were adequately performed.

M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Reactor Water Cleanup (RWCU) Pump Mechanical Seal Failures

a. Inspection Scope (62707)

The inspector reviewed VY's implementation of program requirements to meet the requirements of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."

b. Observations and Findings

On January 21, operators secured the "A" RWCU Pump and isolated the RWCU system in response to a failure of the pump's seal. At the time, the "B" RWCU Pump had just been taken out of its standby alignment for maintenance. As a result, approximately nine hours passed before the "B" pump could be placed in service. The "A" pump was repaired and was placed back in service on January 29.

VY classified this failure as a Maintenance Rule Functional Failure (MRFF) based on the inability of the pump to meet several "in scope" functions for the system listed in the VY 10 CFR 50.65 Maintenance Rule Scoping Basis document. This MRFF caused the system to reach performance criteria that requires a Performance Evaluation.

c. Conclusions

VY appropriately implemented Maintenance Rule Program requirements for evaluation and classification of a reactor water cleanup pump seal failure that occurred on January 21, 2000.

M8 Miscellaneous Maintenance Issues

M8.1 (Closed) URI 05000271/1999007-02: SGTS Heater Testing and ANSI N510 Commitments

Several concerns were identified during observation of a standby gas treatment system (SGTS) surveillance on September 8, 1999. Specifically, the inspector questioned the adequacy of the heater power monitoring technique and whether the monitoring method was consistent with the intent of ANSI N510.

VY initiated ER 99-1075 to evaluate these concerns. The significant result of this evaluation was the determination that the TS-required value for SGTS heater power had been based on the nameplate data for the heater. The actual power required for the heater to perform its design function is less. The result was that there was very little margin for variations in heater performance, and therefore, very little margin for instrument error, in demonstrating that the TS requirement was being satisfied. To address this problem, VY engineering is determining the minimum acceptable heater power, with the result to be submitted as a TS amendment. In addition, VY engineering is evaluating inclusion of the 5% phase balance requirement in the surveillance procedure.

VY subsequently obtained current measurements with a "clamp on" ammeter, verified the TS required SGTS heater power, consistent with the ANSI N510-1975. No violation of the TS surveillance requirement occurred. Based on VY's planned corrective actions, and since no other applicable regulatory requirements were identified, this unresolved item is closed.

III. Engineering

E2 Engineering Support of Facilities and Equipment

E2.1 Main Steam Isolation Valve Partial Closure Testing

a. Inspection Scope (37551)

On February 10, 2000, the licensee requested the NRC exercise discretion by not enforcing compliance with Technical Specification Surveillance Requirement 4.7.D.1.d for one main steam isolation valve, MSIV-80C, or the associated actions of TS 3.7.D.2 and TS 3.7.D.3. The surveillance requirement directs twice-weekly partial closure testing of all MSIVs. The licensee requested this discretion because of concerns that performing this surveillance for MSIV-80C could result in an unnecessary plant transient. The licensee's request was reviewed by NRC personnel at the Region I office and at the Office of Nuclear Reactor Regulation.

b. Observations and Findings

The licensee identified a slow return-to-open time for MSIV-80C during its twice-weekly surveillance test. An evaluation of the potential causes led VY to conclude that a 3-way valve in the actuator's air control unit (used only for the partial closure test) is most likely degraded. The 3-way valve is not actuated during the MSIV's safety-related isolation function and its failure, "as-is", will not affect the MSIV's safety-related operation.

VY's request for enforcement discretion was followed by a TS change request that would remove the slow, partial closure testing requirement for all MSIVs. VY stated that this particular test was originally required due to reliability concerns associated with certain MSIV actuator components. Although the subject components had been replaced in the mid 1980's, and again in the mid 1990's, VY continued to perform the partial closure testing. Additional information on this issue is contained in the licensee's written request for enforcement discretion, dated February 11, 2000 (Accession Number ML003685531), and the associated TS change request also dated February 11, 2000 (Accession Number ML003685540).

The operability of MSIV-80C is demonstrated quarterly, in accordance with ASME Code Section XI testing requirements. During this test, reactor power is reduced to below 75 percent, the valve is given a normal close signal, and its closure stroke time is measured to verify the TS required stroke time of 3 to 5 seconds. MSIV-80C has consistently met the TS criteria, most recently on February 9, 2000, and will continue to be tested in this manner.

In accordance with the NRC Inspection Manual, Part 9900, this issue will be tracked as an unresolved item pending review for any violations that may have led to VY's need for enforcement discretion. **(URI 05000271/2000-001-02: NOED For MSIV Partial Closure Test)**

c. Conclusions

VY requested enforcement discretion to eliminate twice-weekly partial closure testing of one main steam isolation valve. The actuator controls for this test had been degrading and presented the risk of an unnecessary plant transient. NRC granted the requested enforcement discretion on February 10, 2000. Quarterly valve testing, required by the Technical Specifications and ASME Code Section XI, demonstrates the valve will perform its intended safety function.

An unresolved item was opened pending NRC review for any violations that may have led to VY's need for enforcement discretion.

E8 Miscellaneous Engineering Issues

E8.1 Administrative Closure of Items Related to Engineering

The following open items were closed based on an administrative review of the original inspection reports and a determination that there are other open items tracking the same issue, or there were no violations of NRC requirements documented.

IFI 05000271/1999009-02: Root Cause for RHR Valve Stem Failure (This issue is being tracked by LER 05000271/1999-006-00)

IFI 05000271/1999011-01: Surveillance Conducted Without Entering an LCO

IFI 05000271/1999011-02: Effect of position indicators on motor-operated valve operation

IV. Plant Support

R1 Radiological Protection and Chemistry (RP&C) Controls

R1.1 Radiological Controls

a. Inspection Scope (71750)

The inspector selectively reviewed planning, preparation and applied radiological controls for repair of "A" and "B" reactor water clean-up (RWCU) pumps. The inspector reviewed radiological surveys, ALARA Planning, and applicable radiation work permits. The review was against criteria contained in 10 CFR 20 and applicable station procedures. The inspector also reviewed whole body count data, as appropriate.

b. Observations and Findings

VY performed ALARA planning for the work activity, established ALARA goals for the work, provided pre-job work briefings, and established radiation work permits to control the work consistent with program procedures. VY used engineering controls to minimize airborne radioactivity, conducted whole body counting for personnel identified to have sustained facial contamination, and completed internal dose assessments, as appropriate. No significant intakes of radioactive material was identified.

c. Conclusion

VY established and implemented acceptable radiological controls for repair of the reactor water clean-up pumps.

R1.2 Radioactive Waste Sources and Processing Systems, Radionuclide Scaling Factors, and Waste Classification

a. Inspection Scope (86750)

The inspector reviewed and discussed the following matters:

- sources of radioactive waste (radwaste) at the station, current waste generation rates
- processing (as appropriate) and handling of the waste
- the development of scaling factors for difficult to detect and measure radionuclides
- the classification and packaging of radioactive waste
- processing of non-radioactive/non-contaminated trash shipped for disposal
- implementation of applicable NRC Branch Technical Positions on waste classification, concentration averaging, waste stream determination, and sampling frequency
- current waste streams and their processing relative to descriptions contained in the UFSAR and the station's approved Process Control Program (PCP)
- changes to the PCP, and updating of the UFSAR to reflect changes (as appropriate)

The review was against criteria contained in 10 CFR 20, 10 CFR 61, 10 CFR 71, the UFSAR, the PCP, and applicable NRC Branch Technical Positions. The inspector interviewed various waste processing personnel including system operators and reviewed applicable documentation.

b. Observations and Findings

There were no significant changes in VY's waste streams or processing methodology. VY was processing its waste consistent with information contained within the UFSAR and PCP. The UFSAR and PCP were updated as appropriate. VY performed sampling and analysis of the various waste streams (as appropriate) and developed radionuclide scaling factors for each waste stream. Radioactive waste shipped for disposal was properly classified and packaged consistent with 10 CFR 61.55 and 10 CFR 61.56. VY verified its scaling factors for hard to detect radionuclides consistent with NRC Branch Technical Positions (BTPs) and implemented applicable NRC BTPs on waste classification, concentration averaging, waste stream determination and sampling frequency.

c. Conclusion

VY implemented acceptable programs in the areas of radioactive waste source evaluation, waste processing and handling, radionuclide scaling factor determination, and waste classification.

R1.3 Radioactive Material Transportation Activities

a. Inspection Scope (86750)

The inspector selectively reviewed the following aspects of VY's radioactive waste and radioactive material packaging and shipping activities:

- radioactive waste shipping records for shipments made since the previous inspection
- implementation of applicable shipping requirements including completion of waste manifests
- implementation of the Certificates of Compliance (C of C) for NRC approved shipping casks including limiting package contents consistent with C of C requirements.
- use of NRC approved shipping casks
- implementation of recent NRC and DOT shipping requirements rule changes.

The review was against criteria contained in 10 CFR 61 and 71, 49 CFR 100-199, the applicable disposal facility licenses, and applicable Certificates of Compliance for various shipping casks. The inspector reviewed shipments of low specific activity (LSA) material and surface contaminated objects (SCOs).

b. Observations and Findings

VY implemented a generally effective radioactive waste packaging and shipping program. VY had not made a Type B shipment since the previous inspection.

Packaged shipments of radioactive material and waste shipped to offsite vendors for processing or burial were properly packaged and shipped. Survey documentation for

shipments was clear and radwaste shipment documentation indicated conformance with applicable requirements.

Review of one shipment (No. 99-85) of contaminated material shipped to a vendor in December 1999 revealed that the licensee did not have the most recent copy of the vendors' license to verify that the vendor was authorized to receive the type, form, and quantity of material to be transferred. VY used Amendment No. 33 of License No. SNM-1168, dated February 25, 1998, when Amendment No. 36, dated September 29, 1999, was actually in effect. The latest amendment, however, continued to authorize the vendor to receive the material shipped to it. VY issued ER 2000-0206 to enter this issue in the corrective action program.

c. Conclusions

VY implemented a generally effective radioactive waste and radioactive material packaging and shipping program.

R2 Status of RP&C Facilities and Equipment

a. Inspection Scope (86750)

The inspector walked down accessible portions of the station's radioactive liquid and radioactive solid waste collection, processing, and storage systems/locations (e.g., Radwaste Building, North Warehouse and storage areas exterior to the station). The inspector reviewed storage and handling practices, reviewed the general condition of facilities and equipment, and interviewed personnel involved with various waste handling and processing activities. The inspector reviewed control and storage of radioactive material relative to 10 CFR 20.2006, and general storage practices relative to NRC Bulletin 81-38. The inspector performed selected radiation surveys at radioactive material and waste storage areas.

b. Observations and Findings

The locations toured exterior to the main station buildings were generally clean, maintained, and properly posted and barricaded. Although posting was acceptable, the lower level radwaste building (elevation 230') exhibited degraded housekeeping conditions. The waste sludge tank room was observed to have discolored areas under the tank indicating some apparent liquid flows to the drains. Also, the mixing pump room exhibited degraded housekeeping conditions as compared to other areas of the facility. An absorbent sock had been placed across the door sill to the mixing pump room to preclude liquid from running out the door. Observations during the inspection inside the mixing pump area identified spilled powder-like substance (e.g., resin) and minor water leaks consistent with a previous radiation survey of the area dated January 17, 2000. While no violations of regulatory requirements were evident, VY placed this matter into its corrective action system (ER 2000-0205).

c. Conclusion

VY's waste processing, handling, and storage areas were generally clean and well maintained. However, the lower-level of the radwaste facility exhibited degraded housekeeping conditions as compared to other areas of the facility. VY placed this matter into its corrective action system (ER 2000-0205).

R5 Staff Training and Qualification in RP&C

a. Inspection Scope (86750)

The inspector reviewed the initial and continuing training provided to personnel involved in radioactive waste generating, processing, and handling activities. This included personnel who receive, handle, generate, process, or ship radioactive materials. The review was against criteria contained in NRC Bulletin 79-19 and 49 CFR 172, Subpart H. The inspector reviewed training records, lesson plans and discussed training with cognizant VY personnel. Specific aspects reviewed included identification and testing of all hazardous material employees covered under 49 CFR 172.702(a), requalification training, and documentation of training completion.

The evaluation of licensee performance was based on review of training materials, discussions with personnel, and review of applicable documentation.

b. Observations and Findings

Individuals involved in radioactive materials shipping activities were provided training in accordance with NRC Bulletin 79-19 guidance and 49 CFR 172, Subpart H. These individuals were also knowledgeable of applicable requirements, including changes in NRC and DOT requirements. VY also provided hazardous material training to all station personnel through its general employee training. Appropriately trained and qualified radwaste shipping personnel were providing direct oversight of cask loading and closure activities. Notwithstanding, due to some inconsistencies in implementation of the training program, VY initiated a self-assessment effort to verify that the required training for all affected personnel was appropriately maintained.

c. Conclusion

Overall, radwaste shipping personnel involved in waste shipping activities were provided appropriate training and qualification. VY initiated a self-assessment effort in response to some inconsistencies identified in implementation of the training program.

R7 Quality Assurance in RP&C Activities

a. Inspection Scope (86750)

The inspector reviewed audits, assessments, and surveillances of the radioactive waste handling, processing, storage, and shipping programs as well as audits of the Process Control Program. The review was against criteria contained in the UFSAR and applicable station audit and surveillance procedures.

The inspector also reviewed audits of the adequacy and effectiveness of the corrective action program in the area of radwaste processing, handling, storage, and transportation activities.

b. Observations and Findings

VY performed scheduled audits, using auditors trained in radioactive material and waste shipping, consistent with guidance contained in its quality assurance manual. The audit and surveillance activities were generally performance based, and identified concerns were entered into VY's corrective action program.

c. Conclusions

VY implemented generally effective audits and surveillances of radioactive waste shipping activities.

V. Management Meetings

X1 Exit Meeting Summary

The resident inspectors met with licensee representatives periodically throughout the inspection and following the conclusion of the inspection on March 20, 2000. At this meeting, the purpose and scope of the inspection was reviewed, and the preliminary findings were presented. The licensee acknowledged the preliminary inspection findings.

The inspector asked the licensee whether any material examined during the inspection should be considered proprietary. No proprietary information was identified.

LIST OF ACRONYMS USED

ALARA	As Low As Reasonably Achievable
ANSI	American National Standards Institute
BTP	Branch Technical Position
C of C	Certificate of Compliance
CFR	Code of Federal Regulation
DOT	Department of Transportation
ER	Event Report
IFI	Inspector Follow-up Item
LCO	Limiting Condition for Operation
LSA	Low Specific Activity
MG	Motor-generator
MRFF	Maintenance Rule Functional Failure
MSIV	Main Steam Isolation Valve
NCV	Non-cited Violation
NOED	Notice of Enforcement Discretion
NRC	Nuclear Regulatory Commission
PCP	Process Control Program
RHR	Residual Heat Removal
RP	Radiation Protection
RP&C	Radiological Protection and Chemistry
RWCU	Reactor Water Clean-up
SCO	Surface Contaminated Object
SGTS	Standby Gas Treatment System
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
UPS	Uninterruptible Power Supply
URI	Unresolved Item
VY	Vermont Yankee
WO	Work Order

ITEMS OPENED, CLOSED, OR DISCUSSED

OPENED

URI 05000271/2000-001-02: NOED For MSIV Partial Closure Test (page 7)

CLOSED

URI 05000271/1999007-02: SGTS Heater Testing and ANSI N510 Commitments (page 5)
IFI 05000271/1999009-02: Root Cause for RHR Valve Stem Failure (page 7)
IFI 05000271/1999011-01: Surveillance Conducted Without Entering an LCO (page 7)
IFI 05000271/1999011-02: Effect of position indicators on motor-operated valve operation
(page 7)

DISCUSSED

None

NON-CITED VIOLATIONS

NCV 05000271/2000-001-01: Radwaste System Alignment not Restored at Completion
of 1999 Refueling Outage (page 3)