December 18, 2000

EA 00-270

Mr. Michael A. Balduzzi
Vice President, Operations
Vermont Yankee Nuclear Power Corporation
185 Old Ferry Road
PO Box 7002
Brattleboro, Vermont 05301

SUBJECT: VERMONT YANKEE - NRC INSPECTION REPORT 05000271/2000-09

Dear Mr. Balduzzi:

On November 18, 2000, the NRC completed an inspection at your Vermont Yankee facility. The enclosed report presents the results of that inspection. The preliminary findings were presented to you and other Vermont Yankee managers in an exit meeting on November 22.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection involved seven weeks of resident inspection, and a region-based inspection of heat exchanger performance.

Based on the results of this inspection, the inspectors identified three issues of very low safety significance (Green). All three issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as non-cited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these non-cited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, 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; and the NRC Resident Inspector at Vermont Yankee.

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Sincerely,

/RA/

Glenn W. Meyer, Chief
Projects Branch 3
Division of Reactor Projects

Docket No. 05000271
License No. DPR-28

Enclosure: Inspection Report 05000271/2000-09

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.	05000271
Licensee No.	DPR-28
Report No.	05000271/2000-09
Licensee:	Vermont Yankee Nuclear Power Corporation
Facility:	Vermont Yankee Nuclear Power Station
Location:	Vernon, Vermont
Dates:	October 1 - November 18, 2000
Inspectors:	Brian J. McDermott, Senior Resident Inspector Edward C. Knutson, Resident Inspector Kenneth S. Kolaczyk, Reactor Inspector
Approved by:	Glenn W. Meyer, Chief Projects Branch 3 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000271/2000-009, on 10/1-11/18/00; Vermont Yankee Nuclear Power Station; Vermont Yankee Nuclear Power Corporation; Maintenance Rule Implementation; Post Maintenance Testing; Surveillance Testing; Other

This inspection was performed by resident inspectors and a region-based engineering inspector. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process (SDP) in Inspection Manual Chapter 0609 (see Attachment 1). The inspection identified three Green findings, all of which were non-cited violations.

A. Inspector Identified Findings

Mitigating Systems

- **Green.** The inspectors identified that two radiation monitoring instruments used in the emergency operating procedures, were not included in the Maintenance Rule Program, as required by 10 CFR 50.65(b)(2). This issue was entered in the corrective action program as Event Report (ER) 2000-1717.

  This finding is considered more than minor, because if left uncorrected, the failure to monitor the effectiveness of maintenance on systems used in emergency operating procedures would become a more significant safety concern. This issue was determined to be Green (of very low safety significance) using Phase 1 of the SDP, since the failure to monitor the effectiveness of maintenance on the equipment did not degrade any cornerstone. The failure to include the two radiation monitoring instruments in their Maintenance Rule Program was determined to be a non-cited violation of NRC requirements. (Section 1R12.1)

- **Green.** The inspectors identified that a surveillance test for the residual heat removal service water (RHRSW) system did not adequately evaluate the as-found cooling flow to the pump motors. On October 30 operators adjusted the motor cooling flow for RHRSW pump A to meet the acceptance criteria during a surveillance test. Although this adjustment was directed by the test procedure, the operators are not expected to document the as-found test results. The lack of as-found records for previous surveillance tests has hampered VY's ability to identify repetitive problems or adverse trends in cooling flow. This issue was entered in the corrective action program as ER 2000-1670.

  The failure to perform an adequate as-found test of the RHRSW system is considered an issue of more than minor significance. If left uncorrected, repeated adjustment of the motor cooling flow prior to collecting the surveillance data would mask degrading conditions that could lead to the loss of a safety function. This finding was determined to be Green (of very low safety significance) using Phase 1 of the SDP, because VY was able to show that RHRSW pump A was degraded but operable under the as-found conditions. The failure to provide an adequate test for demonstrating the RHRSW pumps will perform satisfactorily in service is a violation of 10 CFR 50 Appendix B,

Criterion XI, "Test Control." This problem was determined to be a non-cited violation of NRC requirements. (Section 1R22.1)

- **Green.** The inspectors identified that VY operators had accepted leakage from an RHRSW valve when the surveillance procedure they were performing specified that no leakage was acceptable. The operators referenced an open 1998 work order as an explanation; however, no operability determination was documented with the work order and no ER was initiated, as required by VY's administrative procedure AP 0009, "Event Reports."

  This issue was considered more than minor because the RHRSW valve leakage reduces the available water inventory for the Alternate Cooling System (ACS) and therefore has a credible impact on safety. However, this issue was determined to be Green (of very low safety significance) using the Phase 1 screening of the SDP because the current RHRSW leakage rate will not prevent the ACS from meeting its 7-day mission time specified in the safety design basis. The failure to properly identify this condition adverse to quality is a violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action." This problem was determined to be a non-cited violation of NRC requirements. (Section 1R22.2)

B. Licensee Identified Violations

A violation of very low safety significance was identified by Vermont Yankee and was reviewed by the inspectors. Corrective actions taken or planned by VY appear reasonable. This violation involved an improper test of a service water pump and is listed in Section 40A7 of this report.

Report Details

Summary of Plant Status: The plant operated at 100 percent power during this report period with two exceptions. On October 3 a main feedwater regulating valve failed closed. Control room operators responded quickly to the indications of decreasing reactor vessel water level and minimized the impact of this failure. No engineered safeguards features initiated during this transient. Operators reduced reactor power by 20 percent to ensure stable operation of the feedwater level control system during the repair of the failed valve. Following the repairs and post-maintenance testing, operators returned the plant to 100 percent power on October 4. On October 28 operators reduced reactor power to approximately 70 percent in support of surveillance testing and a control rod pattern exchange.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed a detailed walkdown of the residual heat removal system based on its classification as a high risk system in VY's probabilistic risk assessment. This inspection included reviews of the FSAR, piping and instrument drawings, technical specifications, and the system operating procedure. The inspectors verified valve lineups in major flow paths established by the operating procedure, and discussed the system's material condition, open work orders, and outstanding modifications with the system engineer.

b. Issues and Findings

There were no findings identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors evaluated plant areas important to reactor safety in order to assess VY's control of transient combustibles and ignition sources; and the material condition and operational status of fire protection systems, equipment, and barriers. The following areas important to plant risk were toured during this inspection period:

- RCIC room, elevation 232'
- East and West switchgear rooms
- Cable vault

b. Issues and Findings

There were no findings identified.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors verified that VY's maintenance, testing, inspection and evaluation of results were adequate to ensure proper heat transfer for the following heat exchangers:

- Reactor building component cooling water (RBCCW) heat exchanger A and B, which are cooled with water supplied from the Connecticut River via the service water system.

- Heat exchangers used to cool the jacket water, lubricating oil, and intake air for emergency diesel generator A and B. Similar to the RBCCW heat exchangers, all three diesel generator heat exchangers are supplied with cooling water from the Connecticut River via the service water system.

The inspector examined design calculations that analyzed the performance of the above heat exchangers. The inspector verified the calculations contained the heat exchanger design criteria described in the FSAR, technical specifications, design basis documents, and setpoint calculation manual. The heat exchanger preventative maintenance was also reviewed and compared to the commitments VY had made in response to Generic Letter 89-13, “Service Water System Problems Affecting Safety-Related Equipment.” Part of the review included verifying: the heat exchanger preventative maintenance cleaning program was adequate to ensure the cooled systems would meet design requirements; maintenance procedures provided adequate guidance to assess heat exchanger inspection results; and surveillance procedures were adequate to detect degradation in heat exchanger performance.

The service water chemical treatment program was reviewed and discussed with the service water system engineer and members of the chemistry department to verify potential biofouling mechanisms had been identified, corrective measures implemented when necessary, and results monitored for effectiveness. Finally, the inspector examined several event reports that documented issues regarding the performance of the service water system. The purpose of the review was to verify adequate corrective action was implemented to minimize the possibility of event recurrence.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

.1 Incomplete Maintenance Rule Scope for the Containment Air Monitoring System

a. Inspection Scope

On August 28 VY initiated Event Report (ER) 2000-1295 because the power supply to the containment air monitor (CAM) sample pump appeared degraded following maintenance. As a result the system was declared inoperable by the shift supervisor. (The CAM system provides control room indication of particulate and gaseous radiation levels inside the primary containment.)

To assess VY's implementation of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," (the Maintenance Rule), the inspectors reviewed VY's disposition of ER 2000-1295 and the following documents:

- VY Program Procedure PP 7009, "10 CFR 50.65 Maintenance Rule Program," Revision 2
- VY Implementation Guideline No. 2, "Selection of SSCs Within the Scope of 10 CFR 50.65," Revision 3
- VY Maintenance Rule Scoping Basis Document, "Process Radiation Monitoring," Revision 1
- NRC Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 2

The in-scope Maintenance Rule function for the CAM system identified in VY's program was to provide for drywell atmosphere grab sampling. VY considered this function in-scope because "verification that stack release will be within TS limits is required when venting the drywell. Accomplished through grab sampling via the drywell CAM valving/piping." Based on this scope VY determined that problem with the CAM's power supply did not need to be evaluated as a potential Maintenance Rule Functional Failures.

b. Issues and Findings

10 CFR 50.65(b)(2) requires that the scope of the monitoring program specified in paragraph (a)(1) shall include non-safety related structures, systems, and components that are used in plant emergency operating procedures. VY's Maintenance Rule Program identifies the procedure category of Operational Transients (OT) as one type of emergency operating procedure.

As of November 8 VY failed to include the CAM's indication of primary containment radiation levels within the scope of the monitoring program specified in 10 CFR 50.65(a)(1). VY procedure OT 3111, "High Drywell Pressure," Revision 12, instructs operators to monitor the main stack release rate based on the information provided by the CAM's control room indication. A second example of this issue involves VY's failure

to include the stack gas monitoring system in the scope of the monitoring program. Control room indication associated with this system is also relied upon in procedure OT 3111.

This finding is considered more than minor, because if left uncorrected, the failure to monitor the effectiveness of maintenance on systems used in emergency operating procedures would become a more significant safety concern. This issue was determined to be Green (of very low safety significance) using Phase 1 of the SDP (MC 0609, Appendix F), since VY's failure to monitor the effectiveness of maintenance on the equipment degraded no cornerstones.

Operators rely on control room indication from the CAM and stack gas monitoring systems in OT 3111, "High Drywell Pressure," an emergency operating procedure. VY's failure to include these systems in the scope of the monitoring program required by 10CFR50.65(b)(2) is a violation. This violation is being treated as a non-cited violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy (NUREG 1600), issued on May 1, 2000. This issue was entered in VY's corrective action program as ER 2000-1717. **(NCV 05000271/2000-009-01)**

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the maintenance risk assessment and work controls associated with the following activities:

- Planned maintenance on the A service water pump performed between November 6 and November 8.
- Emergent work to replace a failed reactor protection system power supply that resulted in a half scram and half isolation signals on October 13.
- Investigative maintenance on the common control circuit for all four steam jet air ejector suction valves. This work was deferred by the Shift Supervisor on October 6 due to the potential for previously unrecognized operational impact.

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

VY evaluated the potential for the high pressure coolant injection (HPCI) system to experience a water hammer during a system restart under design basis condition. The postulated scenario involved the drainage of water from the HPCI injection line through its minimum flow valve to the torus as HPCI is restarting. The operability determination

associated with ER 2000-1586 concluded that no water hammer would be expected, based on the HPCI system's timing and the physical layout of the injection line will prevent any significant voiding in the piping.

b. Issues and Findings

There were no findings identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors reviewed operator workarounds that would impact the operators' ability to control plant parameters during abnormal or emergency plant operations and the status of VY's repair plans. Two current operator workarounds meet this criteria at VY:

- Erratic operation of the condensate pump minimum flow valve FCV-102-4 is expected under low flow conditions (i.e., post scram) when its controller is in automatic. This condition has forced operators to take manual control of the valve to limit system perturbations.

- Reactor recirculation pump suction valve, RV-43A, has had its circuit breaker danger-tagged open per a temporary modification, due to a ground on its control circuitry located in the drywell. In the event of a recirculation pump seal failure, operators would have to clear the tag and close circuit breaker in order to isolate the pump.

b. Issues and Findings

There were no findings identified.

1R19 Post Maintenance Testing (PMT)

.1 Service Water Pump A

a. Inspection Scope

On November 9 operators aligned SW pump A to perform a post maintenance capacity test in accordance with OP 4181, "Service Water/Alternate Cooling System Surveillance," Revision 33. The initial PMT was aborted due to the unanticipated start of the electric and diesel driven fire protection pumps. VY determined that this condition should have been anticipated (see Section 407A of this report) and initiated appropriate corrective actions (ER 2000-1712). After the test conditions in OP 4181 were revised, VY was able to complete the PMT for SW pump A.

b. Issues and Findings

No findings were identified.

.2 Routine Observations

a. Inspection Scope

The inspectors reviewed and/or observed portions of the post maintenance testing associated with the following work activities using the guidance provided in Attachment 19 of NRC Inspection Procedure 71111:

- Replacement of reactor protection system relays on October 17
- Chemical cleaning of RHR service water pump D on November 11

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

.1 Inadequate As-found Testing of RHRSW Pumps

a. Inspection Scope

On October 30 the inspectors observed a quarterly surveillance test of RHRSW pump A (P-8-1A). The observed portion of surveillance procedure OP 4124, "Residual Heat Removal and RHR Service Water System Surveillance," Revision 52, was being performed to satisfy Technical Specifications 4.5.C.1 and 4.6.E.2.

When the A RHRSW pump was started, the auxiliary operator noted that the SW flow to the pump motor cooler was at 2.4 gallons per minute (gpm). In accordance with OP 4124, step 10, the auxiliary operator adjusted the pump motor cooling flow to within the required band of 3 to 4 gpm.

The inspectors reviewed OP 4124, Section F, "RHR Service Water Pump and Valve Operability and Full Flow Test," against applicable TS requirements and Quality Assurance requirements contained in 10 CFR 50, Appendix B. In addition, the inspectors reviewed NRC Information Notice 97-16, "Preconditioning of Plant Structures, Systems, and Components before ASME Code Inservice Testing or Technical Specification Testing."

b. Issues and Findings

The VY Service Water Systems Design Basis Document, Section 3.29, indicates that the minimum design flow for an RHRSW pump motor cooler is 3 gpm. The inspectors considered the RHRSW pump A test on October 30 a failed surveillance because the as-found motor cooling flow was less than required by the design basis. Because the operators restored the motor cooling flow to the required range during the test, the as-left condition was acceptable.

Step 10 of OP 4124 states "If necessary, adjust RSW-PCV-75A(B/C/D) as required to obtain pump motor cooler flow between 3 to 4 gpm." Step 10a of OP4124 directs the operator record the flow rate on the surveillance data sheet (VYOPF4124.06).

The inspectors concluded that the surveillance procedure did not adequately address the as-found motor cooling flow. Although the 3 to 4 gpm acceptance criteria was listed on the data sheet, only one blank was available for the operators to fill in and the data sheet did not indicate whether this was for the as-found or as-left value. The inspectors also noted that the lack of as-found records for previous surveillances precluded VY's ability to identify degradation of the cooling water components.

VY's failure to perform an adequate as-found test of the RHRSW system is considered an issue of more than minor significance. If left uncorrected, repeated adjustment of the motor cooling flow prior to collecting the surveillance data would mask degrading conditions that could lead to the loss of a safety function. This finding was determined to be Green (of very low safety significance) using Phase 1 of the SDP, because VY was able to show that RHRSW pump A was degraded but operable based on the as-found conditions (low flow, low service water temperature).

10 CFR 50, Appendix B, Criterion XI, "Test Control," requires that all testing to demonstrate a system will preform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. Contrary to the above, as of October 30, VY's surveillance procedure OP 4124 did not adequately demonstrate that RHRSW pumps would perform satisfactorily in service. Specifically, the as-found motor cooling flow was below its design basis value and the failure to meet this system requirement was not adequately addressed by the surveillance procedure. This violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NUREG 1600), issued on May 1, 2000. The issue was entered in VY's corrective action program as ER 2000-1670. **(NCV 05000271/2000-009-03)**

.2 Failure to Identify a Condition Adverse to Quality during Surveillance Testing

a. Inspection Scope

On October 30 the inspectors observed auxiliary operators performing the in-plant activities associated with the quarterly surveillance test of RHRSW pump A (P-8-1A). This surveillance activity was chosen based on the RHRSW system having a risk significant designation in VY's Maintenance Rule Program. The inspectors compared the operators' actions to surveillance procedure OP 4124, "Residual Heat Removal and RHR Service Water System Surveillance," Revision 52.

The RHRSW system is used as part of Alternate Cooling System (ACS) described in FSAR Section 10.8. The ACS is considered a risk significant system under VY's Maintenance Rule Program and its safety design basis includes a 7-day supply of water contained in the cooling tower's deep basin. Leakage from the RHRSW system can challenge VY's ability to meet this 7-day criteria.

Step 11 of OP 4124 requires the auxiliary operators to check the leak tightness of the RHRSW to RHR crosstie valves. These systems are isolated by two valves in series. A normally open drain line between the valves (isolated by valve RHR-185) allows the operators to detect leakage from the crosstie valves. The OP 4124 data sheet (VYOPF 4124.06) requires an operator to initial for “No leakage from RHR-185.” On October 30 the inspectors noted leakage from RHR-185 during the A RHRSW pump surveillance.

b. Issues and Findings

The inspectors reviewed the test records after they were approved by a control room operator and the shift supervisor. The inspectors found that the operating crew had signed off Step 11 of OP 4124 and added a note referencing work order (WO) 98-9270. The inspector reviewed the WO and found that no operability statement had been documented. Further, the inspector noted that no Event Report was generated in accordance with VY’s administrative procedure AP 0009, “Event Reports.” Appendix C of AP 0009, Step 3.1.1 states, "An Event Report is not automatically required for every Work Order. However, both are required when . . . [t]he degraded equipment is within the scope of the Maintenance Rule."

This issue was considered more than minor, because the RHRSW leakage reduces the water inventory available the ACS and therefore has a credible impact on safety. However, this issue was determined to be Green (of very low safety significance) using the Phase 1 screening of the SDP because the current leakage rate will not prevent the ACS from meeting its 7-day mission time specified in the safety design basis.

10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," requires that conditions adverse to quality such as deficiencies are promptly identified and corrected. VY's administrative procedure AP 0009 requires the initiation of an Event Report to identify degraded equipment within the scope of the Maintenance Rule. Contrary to the above, between August 1998 and October 2000, VY failed to properly identify leakage of the RHRSW crosstie valve (V10-184) as a condition adverse to quality during approximately nine quarterly surveillance tests. This issue is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NUREG 1600), issued May 1, 2000. This issue was entered in VY's corrective action program as ER 2000-1761. **(NCV 05000271/2000-009-04)**

.3 Routine Observations

a. Inspection Scope

The inspectors reviewed a sample of surveillance test activities for risk significant systems to ensure the systems are capable of performing their intended safety functions. The following activities were reviewed during this inspection period using the guidance provided in Attachment 22 of NRC Inspection Procedure 71111:

- Core Spray B quarterly surveillance test, performed in accordance with OP4123, on October 2
- Emergency diesel generator B monthly surveillance test, performed in accordance with OP 4126 on October 24
- Standby liquid control system quarterly surveillance test, performed in accordance with OP 4114 on October 26
- Emergency diesel generator A monthly surveillance test, performed in accordance with OP 4126 on November 20

b. Issues and Findings

There were no findings identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

.1 Safety System Unavailability - High Pressure Injection and Heat Removal Systems

a. Inspection Scope

The inspectors reviewed the first, second, and third quarter 2000 performance indicator data for Safety System Unavailability associated with the HPCI and RCIC systems to verify that VY had characterized past events in accordance with the criteria described in NEI 99-02, "Regulatory Assessment of Performance Indicator Guideline," Revision 0.

b. Issues and Findings

The inspectors identified that VY over-reported the number of hours that these systems were required for service during the fourth quarter 1999 by including the duration of the refueling outage (approximately one third of the quarter). The inspectors verified that this error had no significant effect on the performance indicator values and would not have caused either performance indicator to cross a color threshold. Therefore, this was a minor issue and not subject to enforcement. VY entered this problem in their corrective action program as ER 2000-1769.

4OA3 Event Follow-up

.1 Feedwater Regulating Valve Failure - October 3, 2000

a. Inspection Scope

On October 3 with the reactor at 100 percent power, a reactor water level annunciator (155 inches) alerted operators to a decreasing water level. Operators identified that the B feedwater regulating valve had failed closed. After initial attempts to restore the normal reactor water level with the feedwater controls were unsuccessful, operators began reducing reactor power using recirculation flow. The shift supervisor instructed operators to insert a manual scram, if the reactor water level decreased to 138 inches. Feedwater flow through the A feedwater regulating valve, in combination with the reduced demand for feedwater, allowed the reactor conditions to stabilize at 140 inches and approximately 86 percent reactor power. No automatic actions occurred, or were expected, since the automatic safety system setpoints were never reached.

Operators restored the reactor water level to the normal 160 inches and then reduced reactor power to approximately 80 percent in support of maintenance repairs. Technicians later determined that the B feedwater regulating valve's positioner had failed.

The inspectors discussed this event with cognizant VY personnel and subsequently reviewed plant records to assess the response of the control room operators and the plant equipment. This event was appropriately entered in VY's corrective action program.

b. Issues and Findings

There were no findings identified.

4OA5 Management Meetings

.1 Exit Meeting Summary

On November 22, 2000, the inspectors presented their overall findings to members of VY management led by Mr. Michael Balduzzi, Vice President of Operations. VY management acknowledged the findings presented and did not contest any of the inspectors' conclusions. Additionally, they agreed that none of the information reviewed by the inspectors was considered proprietary.

40A7 Licensee Identified Violations

The following finding of very low safety significance was identified by VY and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy (NUREG 1600) for being dispositioned as non-cited violations.

NCV Number	Requirement VY Failed to Meet

2000-009-02	VY's failure to adequately integrate design information into a SW pump test procedure resulted in the unintended start of two fire protection system pumps. This issue was a violation of Technical Specification 6.4.F and was entered into VY's corrective action program as ER 2000-1712.

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed During this Inspection

NCV 05000271/2000-009-01:	Incomplete Maintenance Rule Scoping of the Containment Air Monitor System
NCV 05000271/2000-009-02:	Inadequate Service Water Pump Post Maintenance Test Procedure
NCV 05000271/2000-009-03:	Inadequate As-found Testing of RHR Service Water Pumps
NCV 05000271/2000-009-04:	Failure to Identify a Condition Adverse to Quality During Surveillance Testing

LIST OF ACRONYMS USED

ACS	Alternate Cooling System
ASME	American Society of Mechanical Engineers
CAM	Containment Air Monitor
ER	Event Report
FSAR	Final Safety Analysis Report
GPM	Gallons per Minute
HPCI	High Pressure Coolant Injection
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OT	Operational Transient
PMT	Post Maintenance Testing
RBCCW	Reactor Building Component Cooling Water
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
SDP	Significance Determination Process
SW	Service Water
TS	Technical Specification
VY	Vermont Yankee

ATTACHMENT 1

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance

(as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.