March 19, 2001

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

SUBJECT: VERMONT YANKEE - NRC INSPECTION REPORT 05000271/2000-011

Dear Mr. Balduzzi:

On February 17, 2001, 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 March 1, 2001.

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 region-based inspections in the areas of security and radiation safety.

The inspectors identified five issues of very low safety significance (Green). One of these issues was determined to involve a violation of NRC requirements. However, because of its low safety significance and because the issue has been entered into your corrective action program, the NRC is treating this issue as a non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, 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, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at the Vermont Yankee facility.

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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 05000271/2000-011

cc w/encl:
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REGION I

Docket No.	05000271
Licensee No.	DPR-28
Report No.	05000271/2000-011
Licensee:	Vermont Yankee Nuclear Power Corporation
Facility:	Vermont Yankee Nuclear Power Station
Location:	Vernon, Vermont
Dates:	December 31, 2000 - February 17, 2001
Inspectors:	Brian J. McDermott, Senior Resident Inspector Edward C. Knutson, Resident Inspector Gregory C. Smith, Security and Safeguards Inspector Paul R. Frechette, Security and Safeguards Inspector Joseph T. Furia, Health Physicist Jason C. Jang, Health Physicist
Approved by:	Glenn W. Meyer, Chief Projects Branch 3 Division of Reactor Projects

TABLE OF CONTENTS

SUMMARY OF FINDINGS

IR 05000271/2000-011, on 12/30/00-02/17/01; Vermont Yankee Nuclear Power Station; Vermont Yankee Nuclear Power Corporation; risk assessment and emergent work; operability evaluations; post-maintenance testing; physical protection

This inspection was performed by the resident inspectors and region-based security and radiation protection specialists. The inspection identified five Green findings, one of which was a non-cited violation. The significance of all findings 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).

Cornerstone: Mitigating Systems

- Green. The inspectors identified that VY's on-line risk monitoring program did not accurately model the available main station battery chargers. Temporary Modification 2000-012 eliminated a spare charger for the main station battery system that was assumed to be available in the on-line risk monitoring software.

  This finding was of very low safety significance because the primary chargers for both main station batteries had not been removed from service after the installation of the temporary modification. VY entered this problem in their corrective action process as ER 2001-0035. (Section 1R13.1)

- Green. The inspectors identified that an operability assessment for a main turbine bypass valve problem was inaccurate, because it stated the main turbine bypass valves are not credited in any FSAR analysis. The bypass valves are assumed to function for the Feedwater Controller Failure - Maximum Demand transient discussed in FSAR Chapter 14.5.8. The initial operability evaluation and VY management review did not recognize that the bypass system can affect transient analyses and the minimum critical power ratio (MCPR) operating limit.

  This finding was of very low safety significance because the revised operability determination provided reasonable assurance there would be no impact on the MCPR operating limit. VY entered this problem in their corrective action process as ER 2001-0073. (Section 1R15)

- Green. The inspectors identified that data collected during corrective maintenance for degraded over-current relays was not bounded by the values that had been assumed in an associated operability determination. VY did not confirm the as-found condition was consistent with the deficiency evaluated in Basis for Maintaining Operation (BMO) 2000-016. This was of concern because similar degraded relays were installed in other safety related 4kV breakers.

  This finding was of very low safety significance because a revised operability determination provided reasonable assurance of operability for the affected safety related 4kV switchgear and associated systems. VY entered this issue in their corrective action program as ER 2001-0193. (Section 1R19.1)

Cornerstone: Physical Protection

- Green. During an NRC-conducted test of the Intrusion Detection System, the system failed to detect two attempted penetrations into the Protected Area, which did not comply with 10 CFR 73.55 (c)(4) and Section 6.3.b of the Vermont Yankee Physical Security Plan. This finding is considered a non-cited violation of 10 CFR 73.55 (c)(4). Corrective measures were initiated upon identification.

  The finding was of very low safety significance, because although it indicated a vulnerability of safeguards systems, no actual intrusion occurred; and there have not been greater than two similar findings in the past four quarters. (Section 3PP1)

- Green. During tabletop drills (simulated contingency response drills using a facility model), issues associated with protective strategies and target set development were identified. It was determined that some aspects of the currently established protective strategy did not fully conform to the General Performance Objective and Requirements of 10 CFR 73.55(a). The vulnerability was detected through a tabletop drill, and consequently is not considered a violation of NRC requirements. Nevertheless, VY initiated corrective measures upon identification.

  This issue was of very low safety significance, because although it indicated vulnerabilities in the safeguards program, no actual intrusion occurred, and there have not been greater than two similar findings in the past four quarters. (Section 3PP1)

Report Details

Summary of Plant Status: The plant operated at 100 percent power throughout most of this report period, however two unplanned power reductions were necessary. On January 23 operators were required to reduce reactor power to 82 percent in support of emergent maintenance on a circuit breaker in the 345 kV switchyard. On January 26 operators reduced reactor power to 75 percent in response to a decreasing trend in a main condenser vacuum caused by operational problems in the off-gas system. Planned power reductions were also made during this report period for control rod pattern adjustments and main turbine valve testing.

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

1R01 Adverse Weather Protection

a. Inspection Scope

The inspector reviewed VY's program for operation during cold weather. Included in this inspection was a review of the governing procedure, OP 2196, "Preparations for Cold Weather Operations," and the completeness of its implementing enclosures; review of Maintenance Rule scoping and history for applicable plant systems; review of a recently removed temporary modification to provide heating for the diesel fuel oil storage tank and transfer pumps; and walkdowns of systems and structures to verify that the required freeze protection measures were in place and operable.

b. Issues and Findings

No findings or issues of significance were identified.

1R04 Equipment Alignments

.1 Partial System Walkdown

a. Inspection Scope

The inspectors performed a partial system walkdown (visual inspection) on February 13 to verify the availability and material condition of the turbine building closed cooling water system, due to its increased risk significance during work on the B reactor building closed cooling water system.

b. Issues and Findings

No findings or issues of significance were identified.

.2 Full System Walkdown - Standby Liquid Control System

a. Inspection Scope

The inspectors performed a complete walkdown of the standby liquid control system in accordance with NRC Inspection Procedure 71111.04. This activity involved verification of the equipment alignment through in-plant observations, review of emergency procedures (OE 3107, EOP/SAG Appendices), and review of plant records to assess the material condition of the system. Section 3.8 of the Final Safety Analysis Report and VY's Design Basis Document for the Standby Liquid Control System were used as references for this inspection.

b. Issues and Findings

No findings or issues of significance were 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:

- Emergency diesel generator rooms - fire control area (Appendix R)
- Reactor building 252' elevation, northwest - significant fire hazard area (IPEEE)
- Emergency switchgear rooms - fire control area (Appendix R)

b. Issues and Findings

No findings or issues of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed VY's implementation of program procedure PP 7009, "10 CFR 50.65, Maintenance Rule Program," as related to the following safety significant systems and/or specific equipment problems:

- Standby liquid control system
- Failure of the reactor protection system alternate power supply
- Leakage of quench gas from 345 kV switchyard breaker 79-40

b. Issues and Findings

No findings or issues of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

.1 Temporary Modification Not Included In On-line Risk Assessment

a. Inspection Scope

The inspectors reviewed VY's Individual Plant Examination modeling to assess any potential impact from a temporary modification that eliminated the spare charger for the main station battery system.

b. Issues and Findings

The inspectors' review of VY's 1993 Individual Plant Examination (IPE) revealed that the spare main station battery charger was credited in fault trees for the 125 volt dc systems. VY's probabilistic risk assessment (PRA) group subsequently reviewed this issue and found that a 1998 IPE revision removed credit for the spare charger. However, the PRA group did find that the spare charger was assumed to be available in the online risk monitoring software. VY initiated ER 2001-0035 because a plant configuration change implemented through the temporary modification process was not reflected in the risk monitoring software.

This finding was considered more than minor, because the failure to properly model the plant configuration can have a credible impact on safety if it invalidates a risk assessment used to justify removing a component from service for maintenance. However, this issue was determined to be Green (of very low safety significance) using the Phase 1 screening of the SDP because neither main station battery charger had been removed from service after the installation of the temporary modification. VY entered this problem in their corrective action process as ER 2001-0035. **(FIN 05000271/2000-011-01)**

.2 Unplanned 345 kV Switchyard Breaker Maintenance Requires Downpower

a. Inspection Scope

On January 23 operators identified that the quenching gas pressure for 345 kV switchyard breaker 79-40 had decreased below the administrative limit for recharging the breaker in service. Procedures to ensure grid stability required VY to reduce power prior to removing the breaker from service. The inspectors observed VY's execution of this unplanned power reduction.

Operators reduced reactor power to limit the plant's net electrical output to 432 MWe (~82% reactor power) prior to removing breaker 79-40 from service. This breaker has three quenching gas compartments, one for each main line contact. VY has experienced a chronic problem with leakage from one compartment and this condition is made worse by cold weather. Long term corrective actions have been scheduled for the next refueling outage. Although the gas pressure was monitored daily, VY had administrative controls which did not account for the gas loss due to a significant overnight change in outside air temperature.

b. Issues and Findings

No findings or issues of significance were identified.

.3 Emergent Work on B Emergency Diesel Generator Support Equipment

a. Inspection Scope

The inspectors reviewed the emergent work controls and post maintenance testing associated with the repair of the exhaust fan controller that supports operability of the B emergency diesel generator. The controller failed during a monthly emergency diesel generator surveillance test.

b. Issues and Findings

No findings or issues of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

.1 Unplanned Power Reduction (>20%) Due To Off-gas System Operational Problem

a. Inspection Scope

On January 26 operators attempted to establish the vacuum drag drain path for the advanced off-gas (AOG) system's condensate drain tank. The vacuum drag alignment uses a main condenser vacuum to maintain the drain tank level and allows both drain tank pumps to be removed from service. Problems during the transition to the vacuum drag alignment caused both AOG hydrogen recombiners to trip. With no recombiners in service, the main condenser backpressure began to increase.

The inspectors observed the operating crew's response to this event from the control room. Reactor power was reduced to 75 percent in accordance with OT 3120, "Condenser High Backpressure." The shift supervisor established conservative backpressure values for the operators to transfer house electrical loads and scram the reactor. However, operators were able to reestablish control of drain tank level and restart one of the recombiners prior to the condenser backpressure reaching these thresholds or the automatic trip setpoint. VY entered this event into their corrective action program as ER 2001-0162 to investigate potential equipment malfunctions, procedural weaknesses, and human performance errors.

This unplanned power reduction of greater than 20 percent will be counted as part of the performance indicator for unplanned power changes.

b. Issues and Findings

No findings or issues of significance were identified.

.2 Planned Power Reduction for Maintenance and Testing

a. Inspection Scope

The inspectors observed portions of a planned reactor power reduction and testing of main steam isolation and turbine bypass valves on January 6. The operating crew noted that the open stroke time for main turbine bypass valve BPV-2 was slower than expected. The crew initiated ER 2001-0025 and performed an initial operability determination as required by AP 0009, "Event Reports."

b. Issues and Findings

No findings or issues of significance were identified.

1R15 Operability Evaluations

.1 Operability Determination for Turbine Bypass Valve

a. Inspection Scope

The inspectors reviewed the operability determination associated with the slow open stroke time of main turbine bypass valve BPV-2 (ER 2001-0025).

b. Issues and Findings

The inspectors identified that the initial operability assessment associated with BPV-2 was incorrect because it stated the bypass valves are not credited in any FSAR Chapter 14 analysis. The bypass valves are assumed to function for the Feedwater Controller Failure - Maximum Demand transient discussed in FSAR Chapter 14.5.8. The inspectors observed that the ER Screening Committee did not challenge the initial operability determination and that no follow-up engineering evaluation was requested. This issue was brought to VY management's attention and subsequently a more thorough Operability evaluation was written that addressed the potential impact on the Minimum Critical Power Ratio (MCPR) operating limit.

This finding was considered more than minor because the failure to adequately evaluate degraded conditions associated with the main turbine bypass system could result in reactor operation with an insufficient MCPR operating limit. However, this issue was determined to be Green (of very low safety significance) using the Phase 1 screening of the SDP because the revised operability determination provides reasonable assurance there would be no impact on the MCPR operating limit. VY initiated ER 2001-0073

because incorrect information was used in the initial operability determination. **(FIN 05000271/2000-011-02)**

.2 Routine Observation

a. Inspection Scope

The inspectors reviewed the operability determination associated with the temperature controller for the A emergency diesel generator room ventilation, RATS-1A. On January 24 the controller was observed to operate in a two-degree control range rather than the design range of 10 degrees (ER 2001-0163). This indicated further degradation than had been evaluated under BMO 2000-032. The controller was replaced on January 26.

b. Issues and Findings

No findings or issues of significance were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors reviewed an operator workaround associated with the quenching gas leak on 345 kV switchyard breaker 79-40. This issue was not documented on the operations department workaround list. However, this problem was well-known by VY management. The inspectors reviewed this problem to assess its impact on the operators' ability to mitigate design basis accidents or transients.

b. Issues and Findings

No findings or issues of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed VY Design Change 2000-030, "Replacement of 24 Vdc ECCS [emergency core cooling system] batteries with DC power supplies." This permanent modification eliminates two 24 volt battery systems and replaces them with two dc/dc converters that will power each 24-volt ECCS logic bus from its respective main station battery. In addition, a third dc/dc converter will be added to automatically supply Appendix R alternate shutdown loads from the DC-ECCS-B bus. This change enhanced the alternate shutdown approach by eliminating an operator action that was required to restore power to this bus.

b. Issues and Findings

No findings or issues of significance were identified.

1R19 Post-Maintenance Testing

.1 As-found Data Not Evaluated For Impact on Over-current Relay Operability Determination

a. Inspection Scope

On January 30 the inspectors observed post maintenance testing for the upgrade of a microprocessor chip in a Basler relay (work order 00-003169-015). This relay provides instantaneous over-current protection for the D residual heat removal service water pump. This activity was a corrective action associated with a degraded condition (slow instantaneous trip) evaluated under Basis for Maintaining Operation (BMO) 2000-016.

b. Issues and Findings

The inspector identified that the as-found delay in the instantaneous trip time measured by the technicians in the plant was greater than had been previously assumed. BMO 2000-016 evaluated the effects of a 0.2 second delay in the instantaneous over-current circuitry which was identified by the vendor. During the post-maintenance test the inspectors observed delays as long as 0.24 seconds. This finding was communicated to VY management and resulted in the reassessment of the operability basis in BMO 2000-016. VY determined that the safety-related 4kV switchgear remained operable.

This issue was considered more than minor because the failure to validate the operability determination as new information is obtained can have an actual impact on plant safety. However, this issue was determined to be Green (of very low safety significance) using the Phase 1 screening of the SDP because the revised operability determination provided reasonable assurance of operability for the safety-related 4kV switchgear. VY entered this issue in their corrective action program as ER 2001-0193. **(FIN 05000271/2000-011-03)**

.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 the B emergency diesel generator jacket water coolant low temperature alarm detector on January 22
- Maintenance on the A hydrogen-oxygen analyzer on January 25
- Repair of A emergency diesel generator exhaust fan controller RATS-1A on January 26

b. Issues and Findings

No findings or issues of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed and/or observed portions of the following surveillance test activities:

- Standby liquid control system quarterly surveillance on January 25
- Residual heat removal system A loop quarterly surveillance on January 29
- Service water pump quarterly surveillance on February 7

b. Issues and Findings

No findings or issues of significance were identified.

1R23 Temporary Modifications

a. Inspection Scope

The inspector reviewed a plant configuration change noted during a plant tour to determine what configuration control process had been used to implement the change. A protective guard had been removed from a safety class 2 metal expansion bellows on one of the torus-drywell vacuum breaker lines.

b. Issues and Findings

No findings or issues of significance were identified.

2. RADIATION SAFETY
Cornerstone: Occupational Radiation Safety

2OS2 ALARA Planning and Controls

a. Inspection Scope

The inspectors reviewed the results achieved in occupational exposure reductions during 2000, and reviewed the exposure goals established for 2001. The inspectors reviewed the effectiveness of VY's controls to maintain occupational doses as low as reasonably achievable (ALARA). This review assessed: the use of low dose waiting areas, on-job supervision provided to workers, and individual exposure records for selected work groups. An evaluation of engineering controls utilized to achieve dose reductions and an analysis of source term reduction plans were also performed. For

2000 the total occupational exposure was approximately 37 person-rem, below VY's goal of 50 person-rem. This represents the lowest annual occupational exposure total in station history. For 2001, the goal includes work to be performed during the Spring 2001 refueling outage (RF022). Although the final outage exposure goal will not be established until approximately 30 days prior to commencing the outage, preliminary outage exposure estimates were in the range of 110-120 person-rem. Procedure AP 0536, Rev. 14, "ALARA Implementation for Design Changes and Work Analysis," and DP 0535, Rev. 9, "ALARA Documentation, Records and Reports," were reviewed as part of this inspection. The inspectors also reviewed portions of the work week schedule for the period February 11-17, 2001, as it related to radiological work.

The inspectors reviewed work in progress in preparation for RF022, including VY's identification of the highest collective exposure jobs and comparison of associated exposure goals with the actual exposures from similar jobs during previous refueling outages. Jobs reviewed included: reactor disassembly/reassembly; control rod drive replacement; in-service inspection; main steam isolation valve inspection/repair; and leak rate testing. The inspectors also reviewed program documents related to past ALARA performance including the 2000 Annual ALARA Report and the RFO21 Outage Manual.

b. Issues and Findings

No findings or issues of significance were identified.

3. SAFEGUARDS
Cornerstone: Physical Protection

3PP1 Response to Contingency Events

a. Inspection Scope

The following activities were conducted to determine the effectiveness of VY's Response to Contingency Events:

Beginning on January 16, 2001, a review was conducted of VY's defensive strategy, response time lines, target sets, contingency drill scenarios and relevant implementing procedures. Upon completion of this review, on January 18, 2001, three tabletop drills (simulated contingency response drills using a facility model) were conducted with security shift supervisors and response team leaders. The tabletop drills were used to evaluate VY's capability to protect against the design basis threat.

A performance test of VY's Intrusion Detection System (IDS) was conducted by NRC contract personnel on January 17, 2001.

A review of documentation associated with VY's drill and exercise program was conducted on January 18, 2001. This review included the documentation and critiques for contingency response drills conducted in the prior four quarters.

b. Issues and Findings

IDS Performance Test

During the IDS performance test on two occasions out of 23 attempts, the IDS did not detect an attempted penetration into the Protected Area. Title 10 CFR 73.55(c)(4) states, "Detection of penetration or attempted penetration of the protected area or the isolation zone adjacent to the protected area barrier shall assure that adequate response by the security organization can be initiated." Additionally, Section 6.3.b of the Vermont Yankee Physical Security Plan, as required to be implemented by Section 3.G of the Facility Operating License DPR-28, Revision 29, dated December 2, 1999, states that, "the inertia guard fence system is designed to detect attempts to climb over, cut through or crawl under the barrier fence with 95% detection confidence." The failure of the IDS to detect an attempted penetration into the protected area diminished assurance that adequate response by the security organization could be initiated, which constitutes a violation of 10 CFR 73.55(c)(4) and the NRC approved Physical Security Plan.

This issue is more than minor, in that if left uncorrected, the same issue could become a more significant safety concern. Specifically, failure of the IDS could enable unauthorized entry into the Protected Area. The issue affects the Physical Protection Cornerstone, since it involved non-conformance with a safeguard requirement related to the detection of attempted penetration into the protected area. This violation of 10 CFR 73.55(c)(4) and the NRC approved Physical Security Plan is being treated as a non-cited violation (NCV), consistent with Section VI.A.1 of the Enforcement Policy, issued May 1, 2000 (65FR25368). **(NCV 05000271/2000-011-04)**

In applying the Physical Protection Significance Determination Process (SDP), this issue involved a potential vulnerability in access control and in certain safeguards' systems. Notwithstanding this problem, there was no malevolent act and no actual intrusion occurred. Also, there have not been greater than two similar findings in the past four quarters. Accordingly, this finding was determined to have very low safety significance (Green).

Upon identification VY established immediate compensatory measures, including but not limited to adjustment of the sensitivity of affected alarm zones and re-testing of the IDS to verify acceptability. This issue was entered in VY's correction action program as ER 2001-0117.

Protective Strategies

During the conduct of tabletop drills, certain issues involving the acceptability of protective strategies were identified by the inspectors. It was determined that some aspects of VY's currently established protective strategy did not fully conform to the General Performance Objective and Requirements of 10 CFR 73.55(a). The vulnerabilities were detected through a tabletop exercise, and consequently, the finding is not considered a violation of NRC requirements. However, this issue is more than minor, in that if left uncorrected, the same matter could become a more significant safety concern, and may be reasonably viewed as a precursor to a significant event.

Specifically, deficiencies in protective strategies may reduce the effectiveness of the security organization relative to physical protection of the facility.
(FIN 05000271/2000 011-05)

In applying the Physical Protection SDP, this issue was determined not to involve a vulnerability in Access Control but did indicate a vulnerability in certain safeguards plans. Notwithstanding this problem, no actual intrusion occurred, and there have not been greater than two similar findings in the past four quarters. Accordingly, this finding was determined to have very low safety significance (Green).

Upon identification VY established immediate compensatory measures and initiated actions to review the condition and revise the protective strategies, as necessary, to be in conformance with the General Performance Objective and Requirements of 10 CFR 73.55(a). This finding was entered in VY's correction action program as ER 2001-0140.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors verified the performance indicator data submitted by VY through review of plant records and interviews with cognizant VY personnel. The following performance indicators were reviewed using NRC Inspection Procedure 71151:

Performance Indicator	PI Quarters Covered
RETS/ODCM Radiological Effluent Occurrences	Q1 1999 - Q4 2000
Safety System Functional Failures	Q4 1999 - Q4 2000
RCS Specific Activity	Q4 1999 - Q4 2000
RCS Leak Rate	Q4 1999 - Q4 2000
Protected Area Security Equipment Performance Index	Q2 1997 - Q1 2000
Personnel Screening Program Performance	Q2 1997 - Q1 2000
Fitness-For-Duty/Personnel Reliability Program Performance	Q2 1997 - Q1 2000

b. Issues and Findings

No findings or issues of significance were identified.

4OA2 Identification and Resolution of Problems

The inspectors identified two issues concerning VY's implementation of their corrective action program during this report period. Section 1R15 discusses an initial operability determination where VY failed to recognize the potential impact a degraded main turbine bypass system could have on the MCPR operating limit. Section 1R19.2 discusses a problem with the implementation of corrective actions for degraded over-current relays in safety related switchgear. Information collected by VY during corrective maintenance called into question an operability determination affecting other equipment, however this new information was not evaluated.

4OA4 Event Follow-up

Sections 1R13.1 and 1R14.1 of this report discuss unplanned plant power reductions which occurred on January 23 and January 26, respectively. The January 26 event resulted in a power reduction from 100 percent to 75 percent power.

4OA6 Exit Meeting

On March 1, 2001, the resident 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.

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed During this Inspection

FIN	05000271/2000-011-01	Temporary Modification Not Included In On-line Risk Assessment
FIN	05000271/2000-011-02	Operability Determination Did Not Evaluate Potential Impact of Degraded Bypass Valve on MCPR Limit
FIN	05000271/2000-011-03	As-found Data Not Evaluated For Impact on Over-current Relay Operability Determination
NCV	05000271/2000-011-04	Failure of the Intrusion Detection System to perform in accordance with 10 CFR 73.55 (c)(4)
FIN	05000271/2000-011-05	Protective Strategy Did Not Fully Conform to 10 CFR 73.55(a) General Performance Objectives and Requirements.

LIST OF ACRONYMS USED

ALARA	As Low as Is Reasonably Achievable
AOG	Advanced Off-gas
BMO	Basis for Maintaining Operation
BPV	Bypass Valve
CFR	Code of Federal Regulations
ECCS	Emergency Core Cooling System
ER	Event Report
FIN	Finding
FSAR	Final Safety Analysis Report
IDS	Intrusion Detection System
IPE	Individual Plant Examination
MCPR	Minimum Critical Power Ratio
NCV	Non-cited Violation
NRC	Nuclear Regulatory Commission
OT	Operational Transient
PRA	Probabilistic Risk Assessment
SDP	Significance Determination Process
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.