June 2, 2000

Mr. Samuel L. Newton Vice President, Operations Vermont Yankee Nuclear Power Corporation 185 Old Ferry Road Brattleboro, Vermont 05301

SUBJECT: NRC INSPECTION REPORT 05000271/2000-003

Dear Mr. Newton:

On April 24 through May 11, 2000, the NRC completed a baseline inspection of your problem identification and resolution process. The enclosed report presents the results of that inspection. The findings were discussed on May 11, 2000 with Mr. M. Balduzzi, Plant Manager.

This inspection was a review of activities conducted under your license as related to the identification and resolution of problems, compliance with the Commission's rules and regulations, and with the conditions of your license. Within these areas, the inspection consisted of an examination of selected procedures and records, observation of activities, and interviews with personnel.

Based on the results of the inspection, the team concluded that, in general, problems were properly identified, evaluated, and resolved. Nonetheless, the team did identify a vulnerability in your corrective action program associated with the maintenance work order request (WOR) process. Three examples were noted where problems were entered into the WOR process, instead of the event reporting (ER) process, and the problems had not been resolved as of the inspection. In addition, two of those examples had to do with failed surveillances. Your procedure required the initiation of an ER for the evaluation and resolution of the problem. The failure to initiate the ERs is a violation of your Technical Specifications related to procedure implementation. The violation is being treated as a Non-Cited Violation, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65 FR 25368).

Mr. Samuel L. Newton

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room and will be available on the NRC Public Electronic Reading Room (PERR) link at the NRC home page, http://www.nrc.gov/NRC/ADAMS/index.html.

Sincerely,

## /RA/

Wayne D. Lanning, Director Division of Reactor Safety

Docket No. 50-271 License No. DPR-28

Enclosure: NRC Inspection Report 05000271/2000-003

cc w/encl:

R. McCullough, Operating Experience Coordinator - Vermont Yankee

G. Sen, Licensing Manager, Vermont Yankee Nuclear Power Corporation

D. Rapaport, Director, Vermont Public Interest Research Group, Inc.

D. Tefft, Administrator, Bureau of Radiological Health, State of New Hampshire

Chief, Safety Unit, Office of the Attorney General, Commonwealth of Massachusetts

D. Lewis, Esquire

G. Bisbee, Esquire

J. Block, Esquire

T. Rapone, Massachusetts Executive Office of Public Safety

D. Katz, Citizens Awareness Network (CAN)

M. Daley, New England Coalition on Nuclear Pollution, Inc. (NECNP)

State of New Hampshire, SLO Designee

State of Vermont, SLO Designee

Commonwealth of Massachusetts, SLO Designee

Mr. Samuel L. Newton

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION I**

Docket No:	50-271
License No:	DPR-28
Report No:	5000271/2000-003
Licensee:	Vermont Yankee Nuclear Power Corporation
Facility:	Vermont Yankee Nuclear Power Station
Location:	Vernon, Vermont
Dates:	April 24 - May 11, 2000
Inspectors:	Barry S. Norris, Senior Reactor Inspector Brian J. McDermott, Senior Resident Inspector Kathy D. Modes, Radiation Specialist Ram S. Bhatia, Reactor Inspector
Approved By:	Lawrence T. Doerflein, Chief Systems Branch Division of Reactor Safety

## SUMMARY OF FINDINGS

## Vermont Yankee Nuclear Power Station NRC Inspection Report 5000271/2000-003

This inspection report details a review Vermont Yankee's effectiveness in problem identification and resolution. The inspection was conducted by three region based inspectors and one resident inspector. The review was performed using the NRC baseline Inspection Procedure 71152, "Identification and Resolution of Problems." The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609. (Refer to Attachment 1)

## Identification and Resolution of Problems:

- The licensee was effective in the identification, evaluation, and prioritization of problems. However, the team did note that issues identified by the Quality Assurance organization were not always presented to senior management (via the screening meeting) in a timely manner. In one case, the Event Report (ER) went to the screening committee 20 days after it was initiated. (Section 4OA2.1) The licensee's root cause analyses were commensurate with the significance of the issue. The quality was generally good and comprehensive. (Section 4OA2.2) The corrective actions were normally completed as proposed and as scheduled. (Section 4OA2.3) The VY staff were familiar with the program for implementation of a safety conscious work environment. There was no indication of any hesitancy on the part of the station personnel to identify safety issues to management. (Section 4OA2.4)
- NO COLOR. The team identified that the augmented off-gas building ventilation system failed a surveillance in May 1999. Subsequently, the licensee identified that the shutdown iodine filter for the mechanical vacuum pump for the main condenser failed a surveillance in March 1998. In both cases, a work request was initiated to repair the system; but no ER was written, as required by the ER procedure. The team identified a third example where a work request was initiated to resolve a discrepancy related to an alarm setpoint, but the request was canceled without resolving the problem. Nonetheless, the failure to initiate ERs for the first two issues is a violation of the VY Technical Specifications related to procedure implementation, and is being treated as a Non-Cited Violation. The violation was not assessed using the Significance Determination Process, as it did not impact one of the cornerstones; however, it provides substantive information relative to the cross cutting issue of problem identification and resolution. (Section 40A2.1)

## Report Details

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

## 1R12 Maintenance Rule Implementation (IP 71152)

(Closed) VIO 50-271/99012-01: Failure to Balance Reliability and Unavailability in the Periodic Evaluation Required by 10CFR50.65(a)(3)

In August 1999, the NRC identified that Vermont Yankee (VY) did not monitor the unavailability of specific structures, systems, and components (SSCs) during the 1998 refueling outage. The NRC concluded that VY was unable to effectively balance reliability and unavailability for the periodic evaluation required by 10CFR50.65(a)(3). In response to the violation, VY revised Implementation Guideline No. 9, "SSC Performance Monitoring," to require the use of specific unavailability criterion for risk significant SSCs. Quantitative unavailability targets for SSCs were derived and used in the assessment for the balancing of SSC reliability and unavailability for the recently completed refueling outage. The inspector noted that this evaluation identified several instances where unavailability criteria were exceeded, and VY appropriately entered these events into the corrective action process to identify the causes of the ineffective maintenance. This violation is closed.

## 4. OTHER ACTIVITIES

## Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Occupational Radiation Safety, Public Radiation Safety, and Physical Protection

## 4OA2 Identification and Resolution of Problems (IP 71152)

The inspection was to determine if problems affecting equipment, personnel, or processes at Vermont Yankee (VY) were properly identified and resolved. This included VY's review and prioritization of the problem, the evaluation for operability and reportability, and that the appropriate level of root cause analysis (RCA) was performed to ensure the problem did not recur. The inspectors reviewed Event Reports (the formal corrective action program) and other documents used at VY for the identification and resolution of problems. The systems used VY included: Event Reports (ERS), Maintenance Work Requests, Contamination Reports, Training Change Requests, and Procedure Change Requests.

The inspectors' review included: 16 implementing procedures; 18 Event Level 1 ERs, 51 Event Level 2 ERs, and 51 Event Level 3 ERs; 37 non-cited violations and 5 cited violations; 21 items related to operating experience; 16 self-assessments; 25 quality assurance audits and surveillances; and 8 meeting minutes for the onsite and offsite review committees. The inspectors focused on safety-related and risk significant systems and components The specific documents reviewed were chosen to acquire a sufficient sample across all of the cornerstones, and are listed in Attachment 2 to this report.

## .1 Effectiveness of Problem Identification, Evaluation, and Prioritization of Issues

#### a. Inspection Scope

The inspectors reviewed the documents listed in the Attachment 2 to determined that problems, when identified, were entered into the appropriate program for resolution. The inspectors also reviewed the lists of operator workarounds and temporary modifications, the security events log, and the results of the management observation program to determine if all issues, as necessary, were entered into one of the programs for correction. Interviews were conducted with plant staff and management, and the employee concerns program coordinator.

The inspectors reviewed a sample of ERs to assess VY's determination of ER Event Level (1, 2, or 3) which relates to the depth of review to determine the reason for the problem (RCA, apparent cause evaluation, or most probable cause). The inspectors assessed the licensee's review of the ERs for operability and reportability. The team also examined the identification and characterization of equipment issues affecting reliability and/or unavailability of system within the scope of the Maintenance Rule.

In addition, the inspectors reviewed quality assurance (QA) audits and surveillance reports, departmental self-assessments, and functional area assessments.

#### b. Observations and Findings

There were no significant findings in this area. Problems identified at VY, whether by the licensee, contractors, or third party reviewers were entered into one of the licensee's programs for corrective action. For most problems, personnel used the ER system to initiate the process of evaluation and resolution; although many of the issues were entered directly into the work order request (WOR), or one of the other systems. The ERs were appropriately classified for Event Level (1, 2, 3), which correlated to the depth of the review (RCA, apparent cause evaluation, most probable cause) for the reason for the problem. The identification of problems by VY personnel was not limited to actual problems at VY, but also to potential or undiscovered problems discovered through the review of operating experience information. The inspectors attended the daily screening meetings of the ERs and WORs, and considered the management at the meetings to be questioning and conservative with respect to assigning the Event Level.

The inspectors did, however, identify an example where an equipment problem was entered into the WOR process, but the equipment was not repaired in a timely manner. During the inspection, the licensee identified a second example. Specifically:

- In May 1999, the augmented off-gas building ventilation system failed the annual filter differential pressure test. During the inspection, the team identified that the system had not been repaired or retested. The licensee initiated ERs #2000-0635 and #2000-0719.
- In March 1998, the shutdown iodine filter for the mechanical vacuum pump for the main condenser failed the differential pressure test. During the inspection,

VY identified that the filter had not been replaced or retested. The license initiated ER #2000-0704.

The above issues were determined to be more than minor, did not affect any cornerstone, but provides substantial information regarding cross-cutting issues (i.e., no color) in accordance with NRC Manual Chapter 0610\*, Appendix E. Although the systems were degraded, the equipment was capable of performing its function or was not required for the current plant condition. Procedure AP-0009, "Event Reports," paragraph A.1.a requires that an ER be initiated for surveillance testing that identifies conditions outside acceptance limits that are indicative of plant equipment problems where function is impacted. The VY Technical Specification, Section 6.4, states that written procedures shall be established and implemented. Although the significance was low, the failure to initiate an ER upon when a surveillance did not meet acceptance criteria is a violation of the VY Technical Specifications. This violation is being treated as a Non-Cited Violation (NCV), in accordance with Section VI.A of the NRC's Enforcement Policy. **(NCV 50000271/2000-003-01)** 

In addition, in May 1999, during work on a 345KV switchyard breaker, VY identified that the setpoint for the insulating gas (SF<sub>6</sub>) low pressure alarm for this breaker was 600 pounds per square inch (psi). A WOR was initiated to resolve the discrepancy between the alarm setpoint for this breaker and the alarm setpoint for the other breakers, which was 1400 psi. During the inspection, the team identified that the WOR had been canceled without resolving the discrepancy. The licensee initiated ER #2000-0722.

VY self-assessments and third party reviews were critical and identified several issues that were entered into the corrective action program for resolution. The types of problems identified during the self-assessments and QA audits and surveillances were comparable to the issues identified by the inspection team. However, the inspectors did note that when QA identified a problem, the ER did not always go to the screening meeting in a timely manner. For example, in one case the ER went to the screening committee 20 days after it was initiated. Although the ER procedure, AP-0009, does not have a specific requirement for timeliness of ER screening, the team considered 20 days to be excessive and could result in delay for an operability determination. The licensee initiated ER #2000-0720.

## .2 Root Cause Analysis

#### a. Inspection Scope

The inspectors reviewed the licensee's investigation into the reason for the problems identified on the ERs listed in the Attachment. The extent of investigation was dependent on the Event Level of the ER.

## b. Observations and Findings

There were no significant findings in this area. The root cause analyses (Event Level 1 ERs) and the apparent cause evaluations (Event Level 2 ERs) were generally of good

quality and comprehensive. As appropriate, they considered common cause and extent of condition.

However, the team did identify one example where an RCA was required for an Event Level 1 ER, but it was not completed and VY management was unaware of this. Specifically, in September 1999, the refueling floor radiation monitor failed high, resulting in a Group III containment isolation (as designed). ER 1999-1052 was written and classified as Event Level 1, which required an RCA. As part of VY's corrective action process, actions resulting from an ER were assigned a number in the Commitment Tracking System and the ER was closed. In this case, Commitment 1999-1052-01 was to send the failed monitor to the manufacturer for determination of a root cause. The monitor was shipped in November 1999 and the commitment was closed. During the team's review of the ER, the inspector noted that the RCA was not in the package and requested a copy. At that time, it was identified that the manufacturer had submitted a failure analysis report but not an RCA. The licensee subsequently initiated ER 2000-0637 to address this issue. This particular matter constitutes a violation of minor significance and is not subject to normal enforcement action.

#### .3 Implementation of Corrective Actions

#### a. Inspection Scope

The inspectors reviewed the recommended corrective actions against the reasons for the problem identified by the licensee during their investigation (for example, the RCA). The review included an assessment of the backlog of corrective actions, including the maintenance and engineering backlogs, to determine in any actions, individually or collectively, represented an increased risk due to the delay of implementation.

## b. Observations and Findings

There were no significant findings in this area. The proposed corrective actions were appropriately scheduled commensurate with both the risk significance and the plant impact. By sampling, the inspectors verified that corrective actions were properly completed; such as procedure revisions, engineering calculations, and in-plant repairs.

## .4 Assessment of Safety Conscious Work Environment

#### a. Inspection Scope

The inspectors reviewed the licensee's Employee Concerns Program (ECP) for implementation of a safety conscious work environment. The team interviewed plant staff to determine if conditions existed that would result in personnel being hesitant to raise safety concerns to their management and/or the NRC. Approximately forty individuals were interviewed.

#### b. Observations and Findings

There were no significant findings in this area. Plant personnel were familiar with the ECP process and there was no indication of any hesitancy on the part of personnel to identify safety issues to management.

## 4OA5 Management Meetings

#### Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Balduzzi, Plant Manager, and other members of licensee management at the conclusion of the inspection on May 11, 2000. The licensee acknowledged the findings presented.

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

## 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
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- OccupationalPublic
- Physical Protection

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.

## ATTACHMENT 2

## PARTIAL LIST OF PERSONNEL CONTACTED

## Vermont Yankee

M. Balduzzi - Plant Manager

- K. Bronson Superintendent, Operations
- D. Calsyn Manager, Technical Support
- M. Desilets Manager, Radiation Protection
- J. Dreyfuss Superintendent, Technical Services
- J. Hoffman Director, Design Engineering
- D. Katch Manager, Chemistry
- J. Laughney Manager, Operational Quality Assurance
- J. Moriarty Manager, Security
- S. Naeck Manager, Mechanical Maintenance
- S. Newton Vice President, Operations
- R. Sojka Superintendent, Maintenance
- R. Wanczyk Coordinator, Employee Concerns Program
- D. Yazi Manager, Engineering (acting)

## <u>NRC</u>

- J. Jacobson Project Manager, NRR
- E. Knutson Resident Inspector
- R. Summers Senior Project Engineer

## ITEMS OPENED, CLOSED, AND DISCUSSED/UPDATED

## **Opened & Closed**

271/2000-003-01	NCV	Failure to Initiate an Event Report for C	Dut-of-Service Equipment, as
		Required by Procedure	(IR Section 4OA2.1)

## <u>Closed</u>

271/1999-012-01	VIO	Failure to Balance Reliability and Unavailability	in the Periodic
		Evaluation Required 10CFR50.65(a)(3)	(IR Section 1R12)

## LIST OF ACRONYMS

- CFR Code of Federal Regulations
- ER Event Response
- NCV Non-Cited Violation
- NRC Nuclear Regulatory Commission
- RCA Root Cause Analysis
- TS Technical Specification
- VIO Violation
- VY Vermont Yankee
- WOR Work Order Request

## LIST OF DOCUMENTS REVIEWED

PROCED	URES
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FROCEDORE			
AP-0009	Revision 10	Event Reports	
AP-0010	Revision 28	Notifications and Reports Due	
AP-0020	Revision 21	Control of Temporary and Minor Modifications	
AP-0028	Revision 19	Commitment Tracking	
AP-0038	Revision 01	Operating Experience Procedure	
AP-0057	Revision 00	Self-Assessment	
AP-0094	Revision 00	NRC Performance Indicator Reporting	
AP-0844	Revision 02	Performance and Documentation of Procurement Quality Receipt Inspections	
AP-6004	Revision 18	Engineering Design Change Request	
AP-6005	Revision 01	Functional Area Assessment Development	
AP-6008	Revision 00	Vermont Yankee Design Change	
AP-6010	Revision 14	In-Plant Audits and Surveillances	
AP-6025	Revision 05	Quality Control / Independent Inspection	
DP-0550	Revision 02	Radiation Protection Department Self-Assessment Procedure	
OP-4501	Revision 15	Filter Testing	
PP-7016	Revision 01	Vermont Yankee Observation Program	
PP-7017	Revision 00	Corrective Action Program Procedure	
RP-0537	Revision 04	Contamination Events Procedure	
EVENT REPO	DRTS:		
Event Level 1	ERs (includes	a Root Cause Analysis)	
95-0303	Both Plant Sta	ack Sampling Systems Were off at the Same Time	
97-0217	Non-Conserva	ative Design Assumptions Discovered in a VY Equipment Qualification	
	Program		
97-0401	Group III Isola	ation in "B" Reactor Building Vent Rad High Spike	
98-0098	Fire Barrier W	ork per Minor Modification Resulted in Plant Scram (Noise)	
98-0298	Hydrogen Recombiner Tripped on Low Cooling Water Flow		
98-0352	Cable Routing Not Consistent with FSAR		
98-0579	Failed Fuel Assembly Identified During Sipping		
98-0942	HPCI/RCIC Low Steam Pressure Isolation Bypassed During Startup		
98-1013	Reactor Build	ing Blowout Panels-relief Pressure Design	
98-1037	Lack of Coord	lination - Breaker 3v4 Control Power to Establish the Vernon Tie for	
	Alternate Shu	tdown	
98-1251	Group III Isola	ation Following Loss of Power to "B" RPS	
98-1339	"B" SBGT Far	n Tripped When HPCI Gland Exhaust Fan Started	
99-0544	Missed Surve	illance for Reactivity Anomalies	
99-1052	Refuel Floor F	Radiation Monitor Failed High Resulting in GRP III Isolation	
99-1413	The MG-1-1b	Recirculation MG Set Field Breaker Failed to Open on Demand	
99-1529	SJAE Source	Check Not Performed	
99-2071	"A" Recirculat	ion Pump Tripped Due to Loss of Both MG Lube Oil Pumps	
2000-0264	Reactor Build	ing Closed Cooling Water Design	
Event Level 2	ERs (includes	an Apparent Cause Evaluation)	
98-0149	Tritium Detect	ted in North Storm Drain Sample	

- 98-0149 Fire Barrier with a Major Defect 98-0199
- Cable Tray R352SII with a Degraded Fire Stop Material 98-0201
- High Radiation Area Boundary / Barricade Found Open 98-0268
- Boundary of HRA Compromised by Ladder 98-0273

- 98-0296 Loss of Vernon Tie Informed by ISO NE
- 98-0313 Discrepancy Between the HPCI High Steam Flow Limit in the TS and FSAR for Automatic Isolation
- 98-0436 High Radiation Area Boundary Violation
- 98-0446 "B" Recirculation MG Set Field Breaker Failed to Open
- 98-0514 Adverse Trend Molded Case Breaker Failures
- 98-0667 MOV V23-17 Motor Failed Performance Test
- 98-0774 Wiring Not in Accordance with CWD
- 98-0817 Valve Positioner Damage
- 98-0886 Inadequately Posted HRA at CRD Room
- 98-0908 Molded Case Breaker Inspection Failure
- 98-1080 Not Following Procedure During Release of Upper Drywell
- 99-1099 Licensed Operator Placed on Medical Hold Without Informing Operations Department
- 98-1238 Unanticipated HRA During Calibration of Main Steam Line Monitor Using Radiography Source
- 98-1304 Lack of Timeless in DBD Updates
- 98-1426 Administrating Controls for the Control of Temporary Modification (TM) and Minor Modifications Have Not Been Consistently Implemented
- 98-1715 No Administrative Controls for the Implementation of the Blind Performance Test Program
- 98-1960 High Radiation Area Master Key Not Provided to SS
- 98-2205 Nearest Site Residence Exceeding Dose Assumptions
- 99-0067 Ineffective Corrective Actions Have Resulted in the Recurrence of Similar Events
- 99-0176 Fire Door Gaps
- 99-0617 Missing Auxiliary Operator Key Ring
- 99-0629 HPCI/RCIC Pipe Gap Tolerance Exceeded
- 99-0691 NNS (C1729G) Cable Routed Through an SI Containment Penetration as Well as in Other SII Raceway
- 99-0697 Diesel Fire Pump Failed to Achieve Required Pressure
- 99-0784 Core Spray "B" Pump Suction Valve Tripped During IST Surveillance
- 99-0859 Calculation Error Pertaining to the Water Hammer Concerns Found in the Review of EDCR 97-417
- 99-0864 Low Starting Air Pressure on "B" EDG Due to Failure of Flexible Hose
- 99-0929 Apparent Required Actions Included in Setpoint Program Calculations as Recommendations Have Not Been Formally Dispositioned from a Self-Assessment
- 99-0938 Flow Oscillation in Recirculation Loop 'B'
- 99-1012 During EDG Testing, the HPCI Suction Swapped to the Torus
- 99-1099 Licensed Operator Placed on Medical Hold Without Informing the Operations Department
- 99-1140 7 of 22 SROs Failed to Make Correct Protective Action Recommendation During 1999 Annual Operating Exam
- 99-1269 Operations Has Noted an Adverse Trend in Equipment Status
- 99-1503 Workers Unaware of Area Dose Rates
- 2000-0033 Tech Spec Table 4.9.2 Required Test Not Performed Every Quarterly
- 2000-0034 Potential Adverse Trend Exists in the Performance of Plant Surveillances
- 2000-0220 Procedure Allow Breaching of the Control Room Habitability Envelope Without Adequate Compensatory Measure (MM 99-059)
- 2000-0298 Operability Determination for ER 99-1589 and DBD Validation Report Contain Inaccurate Information - DC Disconnect Switches
- 2000-0313 Main Station Battery B Cell Problem

- 2000-0421 Equivalency Evaluation Did Not Perform Assessment Required by GL 95-02
- 2000-0484 Unanticipated Trip of Recirculation MG LO Pump
- 2000-0582 Untimely Screening of Condition Adverse to Quality Identified by the NRC
- 2000-0206 Consignee's Current NRC Rad Material License Was Not in File
- 2000-0704 Untimely Response to Work Order Request/corrective Actions
- 2000-0720 Adverse Trend QA ER's Found with Significant Delays Between Initiation and Screening
- Event Level 3 ERs (includes a Most Probable Cause)
- 98-0278 Unposted HRA
- 99-0004 1T Breaker High Pressure Cylinder Pressure Switch Confusion
- 99-0005 Fire Barrier Inoperable Due to Change in Ventilation
- 99-0041 Missing LHRA Door Key
- 99-0063 Chemistry Department Does Not Always Generate, Store, and Maintain QA Documents
- 99-0115 NUPIC LOCA Audit Finding
- 99-0118 Training Missed of Procedure
- 99-0120 Unposted Radiation Area
- 99-0162 RCIC CST Low Level Auto Suction Transfer
- 99-0175 RCIC Flow Element Curve RCIC Flow Testing
- 99-0215 Delay Between Completion of MOVATS Testing and Declaring the "A" LPCI and CS Systems Operable
- 99-0248 Random Drug Screening Discrepancies
- 99-0302 Work Orders Generated for the New Torus Range Level Indication But the Work Was Not Completed as Scheduled
- 99-0313 10 CFR 73.57 Alignment with Internal Procedure
- 99-0345 Radiation and Contamination Surveys Were Not Performed in Accordance with Station Procedures
- 99-0346 Weaknesses Noted in RWP Area
- 99-0353 Loss of Channel #3 on UHF Radio
- 99-0376 Rad Material Shipping Container Not Properly Marked
- 99-0377 Management Expectations Not Met with Respect to RCAs Associated with Licensee LERs
- 99-0457 HRA not on the logsheet
- 99-0750 Designation of Which Are Locked Valves Is Not Consistent Between Procedures
- 99-0873 DBD Pending Changes Not Submitted for Validation Findings
- 99-0940 Inconsistencies Exists Between VY C-411 and T.S. LCO 3.7.A.6.b
- 99-0958 Loss of Electrical Power at Environmental Station
- 99-0959 Issued Wrong Identification Badge/Card Key
- 99-1153 RBCCW Piping Stresses at Recirculating Pump Connectors
- 99-1210 Problem with RO-20 Meters May Cause Intermittent Drastic Under-response
- 99-1261 FAVP Inconsistent Air Ejector Description in UFSAR
- 99-1284 Security Officer Issued Wrong ID Badge/Card Key
- 99-1286 Failure to Comply with Posted Instructions Following PCM Alarm
- 99-1333 Inadequate Contamination Survey Techniques Observed
- 99-1398 Station Back-feeding Test
- 99-1480 Parts Ordered under Wrong Safety Class
- 99-1527 Posting Violation/Improper Posting
- 99-1777 Worker EPD High Dose Rate Alarm Signed in on wrong RWP
- 99-1974 Missed Step during Calibration of SJAE Radiation Monitors
- 99-1989 Failure to Report Arrest
- 99-2009 an Incorrect Transmitter Installed

- 99-2038 Clear Zone Parking Violation
- 99-2039 Procedural Non-compliance (Arrests)
- 2000-0028 Discrepancy Between Computer Presentation and Content in RWP
- 2000-0045 Unexplained Increase in SJAE Off Gas Release
- 2000-0169 an Area That Was Being Controlled as a LHRA Was Left Unguarded for Approximately 5 Minutes
- 2000-0685 Cracks Identified in Spare Shotgun Stocks
- 2000-0305 Analysis Associated with ER2000043 May Have Been Adequate to Address Broader Issues
- 2000-0446Work Orders Reference EE's that Do Not Address the Component to be Changed2000-0499NRC Violations Were Not Entered into ER Process
- 2000-0509 Failure to Initiate a Condition Affecting Installed Plant Equipment Was Discovered 2000-0635 Untimely Resolution To Work Order Requests/Work Orders
- 2000-0637 Inadequate Corrective Action Creates Potential for Potential for Inadequate Review of RCA
- 2000-0719 Failure to Write ER for Equipment Test (May 1999) Not Meeting Acceptance Criteria

# NON-CITED VIOLATIONS AND VIOLATIONS:

Non-Cited Violations (NCVs):

50-271/98-04-01 **Fuel Bundle Incorrect Orientation** 50-271/98-04-03 Inadequate Installation of Over-Pressure Relief Valve 50-271/98-04-05 High Radiation Area Not Barricaded 50-271/98-08-09 Failure to Maintain Fire Barrier Failure to Continuously Monitor Torus Temperature 50-271/98-09-02 Drain Valves in Torus Vent Systems Not in Proper Position 50-271/98-10-01 50-271/98-10-02 1 Hour Notification Not Made 50-271/98-10-03 Inadequate Procedure for Maintenance on 4KV Circuit Breakers Instrument Isolation Valves Not Closed as Required by TS 50-271/98-11-01 Seismic Wall Qualification Affects EDG LCO 50-271/98-11-02 Missed Surveillance of Relays 50-271/98-12-01 50-271/98-12-03 **Degraded Fire Barrier** Delay in Compensatory Fire Watch 50-271/98-12-04 50-271/98-13-01 Bypass of HPCI/RCIC Isolation Signal Inadequate Design Control for Blowout Panel 50-271/98-13-03 Worked on Wrong Division of Standby Gas Treatment 50-271/98-14-01 HPCI Pressure Switch Isolated During Maintenance Not Returned to Service 50-271/98-14-02 Inadequate 50.59 for HPCI/RCIC Vacuum Breakers 50-271/98-80-05 50-271/98-80-09 Failure to Submit LER **IST Procedure Deficiency** 50-271/99-02-01 EDG Temperature Switch Set Wrong 50-271/99-02-02 Inadequate Procedure for Weld Repairs 50-271/99-02-03 50-271/99-03-01 Inadequate Procedure for Implementing Missed TS Surveillances Failure to Perform an ASME Code Inspection after Valve Repair 50-271/99-03-03 50-271/99-05-02 Inadequate Procedure for Alternate Cooling System Inadequate QA Controls for Purchased Engineering Design Services 50-271/99-05-03 Failure to Revise Limiting Case Analysis for Containment Depressurization 50-271/99-06-02 Inadequate Procedure for Operation of Refueling Bridge 50-271/99-07-01 One Channel of Rod Block Monitor Left Out-of-Service 50-271/99-08-01 50-271/99-09-01 Design of RHR Heat Exchanger Bypass Valves Not Properly Incorporated into Procedure EOP for Containment Flooding Changed Without Approval of NRC (50.59) 50-271/99-09-03

50-271/99-09-04 50-271/99-09-05	Modification for Hardened Vent Did Not Consider Containment Flooding Failure to Inform Workers of Elevated Dose Rates
50-271/99-10-01	Neutron Monitoring Equipment Inoperable Due to Inadequate Surveillance
	Test
50-271/99-10-02	Work on 6 Risk Significant Valves Not Performed Correctly by Contractors
50-271/99-10-03	High Energy Line Break Isolation Valves Chamfering Not in Accordance with Design Documents
50 271/00 11 02	Cable Seneration Jacua
50-271/99-11-03	Cable Separation issue
Violations (VIOs):	

Note: Due to there being no NCVs in the Physical Protection Cornerstone, three violations were chosen for review and implementation of the associated corrective action.

- 50-271/98-04-06Unmonitored Access Pathway into Reactor Building Protected Area50-271/98-05-01Failure of the Security Force to Detect a Test Device a Physical Search50-271/98-05-02Failure of the Perimeter Intrusion Detection System at the Protected AreaBarrier to Detect the Regional Assist Team in Six of Ten Zones
- NOTE: In accordance with the NRC Enforcement Policy, the two violations below had been closed administratively, and entered into the licensee's corrective action program (similar to an NCV). As such, these violations reviewed similarly to an NCV.
- 50-271/98-80-04 Failure to Control Changes to Design Basis Documents
- 50-271/98-80-07 Failure to Obtain NRC Approval prior to Revising QA Commitments

## **OPERATING EXPERIENCE:**

Part 21

- Vendor 99010, dated 7/6/99, Rosemount Part 21 Notification "Potential Need for Capacitor Replacement in Specific Trip/Calibration Systems
- Vendor 99006, dated 4/26/99, Part 21 on Fairbanks Morse / Coltec Diesel Generator Turbocharger (model 730)
- Vendor 99001, dated 1/15/99, Rosemount Nuclear Part 21 for Model 1153B Alphaline Nuclear Pressure Transmitter
- Vendor 2000002, dated2/29/00, Part 21 for Minimum Test Voltage for GE Type AK/AKR Circuit Breakers

Information Notices

- IN 98024, dated 7/14/98, Stem Binding in Turbine Governor Valves in RCIC and Aux Feedwater Systems
- IN 98043, dated 12/8/98, Leaks in the Emergency Diesel Generator Lubricating Oil and Jacket Cooling Water Piping
- IN 98021, dated 6/30/98, Potential Deficiency of Electrical Cable/Connection Systems
- IN 98007, dated 3/10/98, Offsite Power Reliability Challenges from Industry Deregulation
- IN 97090, dated 1/16/98, Use of Non-Conservative Acceptance Criteria in Certain Safety-Related Pump Surveillance Tests
- IN 98040, dated 11/4/98, Design Deficiencies Can Lead to Reduced Pump Net Positive Suction Head During Design-Basis Accident
- IN 98003, dated 3/1/98, Inadequate Verification of Overcurrent Trip Setpoints in Metal-Clad, Low-Voltage Circuit Breakers

OTHER OE

- SOER 990101, dated 1/5/00, Evaluate SOER re: Loss of Grid
- OE8748, dated 3/1/98, RCIC Fails to Develop Proper Discharge Pressure, Speed, Flow Due to Binding of Governor Valve (Hatch)
- OE8728, dated 1/31/98, Common Mode Failure Analysis for Emergency Diesel Generator (DG) Start Failures
- UND 98049, dated 5/22/98, Multiple Control Rod Drift Alarms Results in Manual Scram at Fitzpatrick

SER 9803, dated 9/22/98, Flooding of ECCS Rooms Caused by Fire Protection Water Hammer (WNP-2)

- SEN 189R1, dated 12/13/98, Water Hammer Causes Component Cooling Water System Rupture Disc Failure Following Safeguards Bus Loss of Power
- OE 9301, dated 10/9/98, RCIC Turbine Exhaust Rupture Disc Burst During Cold Quick, Start Test (LaSalle)
- SIL 0623, dated 11/1/99, HPCI and RCIC Peak Pump Discharge Pressure During Surveillance Test
- SIL 0621, dated 10/13/98, Reactor Recirculation System Operation With Locked Flow Control
- SER 001, dated 1/20/00, Reactor Coolant Leak Resulting from Residual Heat Removal (RHR) Piping Failure

## **SELF-ASSESSMENT & FUNCTIONAL AREA ASSESSMENT REPORTS:**

- Technical Support Self-Assessment 2000-01: Conformance with INPO Document "Principles for Effective Self-Assessment and Corrective Programs"
- Technical Support Self-Assessment 2000-02: Problem Identification and Resolution (NRC-type inspection using IP 71152)
- Technical Support Self-Assessment 2000-03: Corrective Action Effectiveness
- Technical Support Self-Assessment 2000-04: Corrective Action Effectiveness
- Self Assessment on Security Equipment, dated 12/30/1999 and associated ER
- Self-Assessment on Seven Day Protected Area Fence Alarm System Climb Test, dated 9/14/1999
- Self-Assessment on Security/Safeguards Event Reports, dated 1/12/2000
- Self-Assessment on Access Authorization, dated 2/28/2000
- Self-Assessment on Security Equipment, dated 3/9/2000
- Self-Assessment on Fitness for Duty, dated 3/10/2000
- Self-Assessment on NRC Inspection Report 50-271/98-05 and NOV, dated 3/2/1999
- Self-Assessment on Tritium Related Issues and Commitments, dated 3/22/1999
- RP Self-Assessment 99-03, Compare 40 Radiation/Contamination Surveys Against Internal Procedure Criterion, dated 3/19/1999
- RP Self-Assessment 00-10, Assess RP Performance in the Area of HRA Controls During RFO21, dated 2/1/2000
- RP Self-Assessment 00-02, Assess Human Performance Attributes of RP Dept's Performance during RFO21, dated 2/3/2000
- RP Functional Area Assessment, dated 10/14/1999

**QUALITY ASSURANCE AUDITS & SURVEILLANCES:** Audits: Audit # 98-02: Chemistry/RETS/REMP/ODCM Security Audit # 98-04: Audit # 98-09: Radwaste/Process Control Program Audit # 99-01: Operations Audit # 99-02: Chemistry/RETS/REMP/ODCM Radiation Protection Audit # 99-03: Audit # 99-04: Security **Emergency Preparedness** Audit # 99-14: Corrective Action / Functional Area Assessment Audit # 99-16: Audit # 99-19: Fitness for Duty / Access Authorization RETS/REMP/ODCM Audit # 2000-02: Audit # 2000-19: Fitness for Duty / Access Authorization Surveillances: Surveillance # 99-013: Operator Performance (Auxiliary Operator Rounds)

Surveillance # 99-023: Emergency Preparedness Drill of 3/23/99

Surveillance # 99-049: Security Force Training and Force on Force Drills, dated 5/19/99 Surveillance # 99-056: **Engineering Self-Assessments** Surveillance # 99-069: Reactor Engineering Northeast Mountain Radio (Public Notification System) Surveillance # 99-092: Surveillance # 99-096: Chemistry - Post Accident Sampling System Surveillance # 2000-030: Emergency Preparedness/Respiratory Protection Radioactive Material Shipment 99-02 Surveillance # 99-009: Assessment # 99-095: **Radiation Protection Work Practices** Assessment # 99-057: **Radioactive Material Shipment Radioactive Material Shipment** Assessment # 99-067: Joint Utility Management Audit (JUMA), dated September 20-24, 1999: Corrective Action Program Effectiveness

## **OVERSIGHT COMMITTEE MEETING MINUTES:**

Plant Operations Review Committee PORC Meeting Minutes, dated 2/3/00 PORC Meeting Minutes, dated 11/28/99 PORC Meeting Minutes, dated 12/01/99 <u>Nuclear Safety Audit Review Committee</u> NSARC Meeting #2000-02R) Minutes, dated 3/8/2000 NSARC Meeting #1999-09R) Minutes, dated 8/16/99 NSARC Meeting #1999-014R Minutes, dated 11/3/99 NSARC Open Item List, dated 4/5/2000 NSARC Questions List, dated 4/5/2000