

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406

December 19, 2007

Mr. Theodore A. Sullivan Site Vice President Entergy Nuclear Operations, Inc. Vermont Yankee Nuclear Power Station 320 Governor Hunt Road Vernon, VT 05354

SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION - NRC PROBLEM

IDENTIFICATION AND RESOLUTION INSPECTION REPORT NO.

05000271/2007007

Dear Mr. Sullivan:

On November 9, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed a team inspection at your Vermont Yankee Nuclear Power Station. The enclosed report documents the inspection findings, which were discussed on November 9, 2007 with Mr. W. Maguire and other members of your staff.

The inspection examined activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. The inspectors reviewed selected procedures and representative records, observed activities, and interviewed personnel.

There were no findings of significance identified during this inspection. On the basis of the sample selected for review, the inspectors concluded that Entergy was effective in identifying, evaluating and resolving problems. Your staff generally identified problems and entered them into the corrective action program at a low threshold. The inspectors determined that personnel prioritized and evaluated issues commensurate with the safety significance of the problems and implemented timely, effective corrective actions. However, the inspectors noted several examples of minor material condition issues that had not been identified by your staff. These issues were subsequently properly documented, evaluated, and assessed within your corrective action program.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS).

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ADAMS is accessible from the NRC Web-site at <a href="https://www.nrc.gov/reading-rm/adams.html">www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

Sincerely,

/RA/

Mel Gray, Chief Technical Support & Assessment Branch Division of Reactor Projects

Docket Nos. 50-271 License Nos. DPR-28

Enclosure: Inspection Report 05000271/2007007

w/ Attachment: Supplemental Information

cc w/encl:

M. R. Kansler, Chief Nuclear Officer and President, Entergy Nuclear Operations, Inc.

- G. J. Taylor, Group President, Utility Operations
- J. Wayne Leonard, Chairman and Chief Executive Officer, Entergy Operations
- J. T. Herron, Senior Vice President, Entergy Nuclear Operations
- M. A. Balduzzi, Senior Vice President and Chief Operating Officer
- J. DeRoy, Vice President, Operations Support
- O. Limpias, Vice President, Engineering
- D. J. Mannai, Manager, Licensing, Vermont Yankee Nuclear Power Station
- E. Cota, Operating Experience Coordinator, Vermont Yankee Nuclear Power Station
- W. F. Maguire, General Manager, Plant Operations, Entergy Nuclear Operations, Inc.
- N. L. Rademacher, Director, Engineering, Vermont Yankee Nuclear Power Station
- J. F. McCann, Director, Nuclear Safety and Licensing
- E. Harkness, Director of Oversight, Entergy Nuclear Operations, Inc.

Assistant General Counsel, Entergy Nuclear Operations, Inc.

- J. H. Sniezek, PWR SRC Consultant
- M. D. Lyster. PWR SRC Consultant
- G. Edwards
- S. Lousteau, Treasury Department, Entergy Services, Inc.
- D. O' Dowd, Administrator, Radiological Health Section, DPHS, State of New Hampshire
- W. Irwin, Chief, CHP, Radiological Health, Vermont Department of Health

Chief, Safety Unit, Office of the Attorney General, Commonwealth of Mass.

- D. Lewis, Pillsbury, Winthrop, Shaw, Pittman LLP
- G. D. Bisbee, Esquire, Deputy Attorney General, Environmental Protection Bureau
- J. Block, Esquire
- J. P. Matteau, Executive Director, Windham Regional Commission
- D. Katz, Citizens Awareness Network (CAN)
- R. Shadis, New England Coalition Staff
- G. Sachs, President/Staff Person, c/o Stopthesale
- J. Volz, Chairman, Public Service Board, State of Vermont

Chairman, Board of Selectman, Town of Vernon

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cc w/encl:

- C. Pope, State of New Hampsire, SLO D. O'Brien, State of Vermont, SLO
- J. Giarrusso, SLO, MEMA, Commonwealth of Massachusetts
- U. Vanags, State Nuclear Engineer, Vermont Department of Public Service
- S. Shaw

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- D. O'Brien, State of Vermont, SLO
- J. Giarrusso, SLO, MEMA, Commonwealth of Massachusetts
- U. Vanags, State Nuclear Engineer, Vermont Department of Public Service
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# **U.S. NUCLEAR REGULATORY COMMISSION**

# **REGION I**

Docket No: 50-271

License No: DPR-28

Report No: 05000271/2007007

Licensee: Entergy Nuclear Operations, Inc.

Facility: Vermont Yankee Nuclear Power Station

Location: 320 Governor Hunt Road

Vernon, Vermont 05354-9766

Dates: October 22, 2007 through November 9, 2007

Team Leader: G. Hunegs, Senior Resident Inspector

Inspectors: B. Fuller, Reactor Inspector

S. McCarver, Project Engineer B. Sienel, Resident Inspector

Approved by: Mel Gray, Chief

**Technical Support and Assessment Branch** 

Division of Reactor Projects

### **SUMMARY OF FINDINGS**

IR 05000271/2007007; 10/22/2007 – 11/09/2007; Vermont Yankee Nuclear Power Station; Problem Identification and Resolution.

This team inspection was performed by two regional inspectors and two resident inspectors. No findings of significance were identified during this inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

# Overall Assessment of Licensee's Identification and Resolution of Problems

The inspectors concluded that Entergy was effective in identifying, evaluating and resolving problems. Vermont Yankee personnel generally identified problems and entered them into the Corrective Action Program (CAP) at a low threshold, and had taken actions to address previous NRC findings. The inspectors determined that Entergy appropriately screened issues for operability and reportability, and prioritized issues commensurate with the safety significance of the problems. Causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors determined that corrective actions addressed the identified causes and were typically implemented in a timely manner. However, the inspectors noted several examples of minor material condition issues that had not been identified by your staff. In addition, the inspectors noted that a corrective action was closed without being properly completed. These issues were determined to be minor and properly documented, evaluated, and assessed during the inspection.

The inspectors determined that operating experience information was appropriately considered for applicability, and corrective and preventive actions were taken as needed. Self-assessments, Quality Assurance audits, and other assessments were critical, thorough, and effective in identifying issues. Based on interviews, observations of plant activities, and reviews of the CAP and the Employees Concerns Program (ECP), the inspectors determined that site personnel were willing to raise safety issues and to document them in the CAP.

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A.	NRC-Identified and Self-Revealing Findings
	None.
B.	Licensee-Identified Violations

None.

#### REPORT DETAILS

# 4. OTHER ACTIVITIES (OA)

### 4OA2 Problem Identification and Resolution

a. Assessment of the Corrective Action Program

### (1) Inspection Scope

The inspectors reviewed the procedures that describe Entergy's corrective action program (CAP) at Vermont Yankee. Entergy identified problems for evaluation and resolution by initiating condition reports (CRs) that were entered into the condition reporting system. The CRs were subsequently screened for operability, categorized by significance, and assigned for further evaluation, resolution and/or trending.

The inspectors evaluated the process for assigning and tracking issues to ensure that issues were screened for operability and reportability, prioritized for evaluation and resolution in a timely manner commensurate with their safety significance, and tracked to identify adverse trends and repetitive issues. In addition, the inspectors interviewed plant staff and management to determine their understanding of and involvement with the corrective action program.

The inspectors reviewed CRs selected across the seven cornerstones of safety in the NRC's Reactor Oversight Process (ROP) to determine if site personnel properly identified, characterized, and entered problems into the CAP for evaluation and resolution. The inspectors selected items from functional areas that included chemistry, emergency preparedness, engineering, maintenance, operations, physical security, radiation safety, and oversight programs to ensure that Entergy appropriately addressed problems identified in these functional areas. The inspectors selected a risk-informed sample of CRs that had been issued since the last NRC Problem Identification and Resolution (PI&R) inspection conducted in September 2005. The inspectors considered risk insights from the station's risk analyses to focus the sample selection and plant tours on risk-significant systems and components. Inspector samples focused on these systems, but were not limited to them. The corrective action review was expanded to five years for evaluation of the emergency diesel generator and service water systems.

The inspectors selected items from other processes at Vermont Yankee to verify that they were appropriately considered for entry into the CAP. Specifically, the inspectors reviewed a sample of engineering requests, operator workaround conditions, operability determinations, work orders (WOs), and system health reports. The inspectors also reviewed completed work packages to determine if issues identified during the performance of preventive maintenance were entered into the corrective action program. In addition, the inspectors reviewed operator logs to determine whether problems described in the logs were entered into the CAP.

The inspectors reviewed CRs to assess whether Entergy personnel adequately evaluated and prioritized identified problems. The issues reviewed encompassed the full range of evaluations, including root cause analyses, apparent cause evaluations, and common cause analyses. CRs that were assigned lower levels of significance which did not include formal cause evaluations were also reviewed by the inspectors to ensure they were appropriately classified. The inspectors observed daily CR screening meetings in which Entergy personnel reviewed new CRs for prioritization and assignment. The inspectors review included the appropriateness of the assigned significance, the scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and identified appropriate corrective actions to address the identified causes. The inspectors also observed Corrective Action Review Board (CARB) meetings during which Entergy managers reviewed root cause evaluations, as well as selected apparent cause evaluations and corrective action assignments. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of problems.

The inspectors reviewed the corrective actions associated with selected CRs to determine whether the actions addressed the identified causes of the problems. The inspectors reviewed CRs for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed the timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors further reviewed CRs associated with selected non-cited violations (NCVs) and findings to determine whether Entergy personnel properly evaluated and resolved the issues. The CRs and other documents reviewed, as well as key personnel contacted, are listed in the Attachment to this report.

### (2) Assessment

# (a) <u>Identification of Issues</u>

Based on the samples selected, the inspectors determined that Entergy staff were identifying problems and entering them into the CAP at a low threshold. In most cases, problems were identified appropriately in CRs. The inspectors observed managers at condition report group (CRG) meetings appropriately questioning and challenging CRs that did not contain sufficient information. The inspectors determined that Entergy appropriately trended equipment and programmatic issues. The inspectors concluded that personnel were identifying trends at low levels, and did not identify trends or repetitive issues that Entergy had not self-identified.

However, the inspectors noted several examples of minor material condition and housekeeping issues that had not been identified by Vermont Yankee personnel and entered into the CAP.

# These included the following:

- Four flexible hoses that connected the individual fire protection system high pressure CO2 tanks to the manifold assembly were kinked, potentially decreasing gas flow (CR 2007-4005);
- An air start copper tube for emergency diesel generator 1-1A was outside it's retaining clip and had missing chaffing protection, resulting in external rubbing during engine operation (CR 2007-4216);
- A residual heat removal service water valve gland follower had metal delamination and corrosion (CR 2007-4008); and
- The 24 Vdc battery D-1 had cell separators with some chipped edges (CR 2007-4004).

The inspectors concluded these issues were minor because they did not impact the safety function of the equipment. Vermont Yankee personnel entered these issues into the CAP during the inspection.

### (b) Prioritization and Evaluation of Issues

The inspectors determined that, in general, Entergy appropriately prioritized and evaluated issues commensurate with the safety significance of the problem. CRs were screened for operability and reportability, categorized by significance, and assigned to a department for evaluation and resolution. The various CR screening and management review groups considered human performance issues, radiological safety concerns, repetitiveness, and adverse trends during the conduct of reviews.

Items were categorized for evaluation and resolution commensurate with the significance of the issues and guidance for categorization was sufficiently definitive for consistent implementation. Operability and reportability determinations were performed when conditions warranted and the evaluations supported the conclusions. Causal analyses appropriately considered extent of condition, generic issues, and previous occurrences. During this inspection, the inspectors noted that Entergy's root cause analysis's (RCAs) were generally thorough, and additional corrective and preventive actions addressed the identified causes.

# (c) Effectiveness of Corrective Actions

The inspectors determined that corrective actions were generally appropriate to address identified issues and typically completed in a timely manner. Corrective actions were generally completed within the corrective action process guidelines described in EN-LI-102, "Corrective Action Program," and controls were placed on long term corrective actions to ensure they were completed within a reasonable time frame. Actions to prevent recurrence were identified and effectiveness reviews were conducted for more significant safety issues.

However, the inspectors determined that corrective actions identified by Vermont Yankee personnel to address the potential for air ingestion from a low level condition in

the condensate storage tank (CST) by the high pressure coolant injection and reactor core isolation cooling pumps were not effectively implemented. Specifically, the inspectors identified that the corrective action to revise operating and surveillance procedures were not properly completed. However, the inspectors determined the changes had been effectively incorporated into the shift turnover procedure and described in an operations night order. The inspectors determined that the issue was minor because the shift turnover procedure and night order provided guidance to ensure operators maintained adequate level in the CST and level had been maintained as required. Vermont Yankee personnel documented and evaluated this issue in their CAP as CR 2007-4181.

# (3) <u>Findings</u>

No findings of significance were identified in the areas of problem identification, prioritization and evaluation of issues, and effectiveness of corrective action.

b. Assessment of the Use of Operating Experience

# (1) <u>Inspection Scope</u>

The inspectors selected a sample of industry operating experience issues to confirm that Entergy had evaluated the operating experience information for applicability to Vermont Yankee and had taken appropriate actions, when warranted. Operating experience (OE) documents were reviewed to ensure that underlying problems associated with the issues were appropriately considered for resolution via the corrective action process. The inspectors also observed plant activities to determine if industry operating experience was considered during the performance of routine and infrequently performed activities. A list of the documents reviewed is included in the Attachment to this report.

NRC inspectors previously reviewed Vermont Yankee personnel's use of operating experience information regarding the partial collapse of a non-safety related cooling tower on August 21, 2007. The results of this inspection are documented in NRC Inspection Report 05000271/2007004 dated November 7, 2007 (ADAMS accession number ML073110213).

## (2) Assessment

The inspectors determined that Entergy appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues. The inspectors assessed that OE was appropriately applied and lessons learned were communicated and incorporated into plant operations.

The inspectors observed that industry operating experience was routinely considered during the performance of plant activities. For example, during shift briefing activities, relevant industry operating experienced was reviewed and discussed before the commencement of shift activities. An operating experience website with links to industry operating experience, pre-job brief information and program requirements was being

maintained. Additionally, operating experience was reviewed during the routine operations focus meeting and was being considered for applicability to the site.

# (3) Findings

No findings of significance were identified in the area of operating experience.

c. Assessment of Self-Assessments and Audits

# (1) <u>Inspection Scope</u>

The inspectors reviewed a sample of Quality Assurance (QA) audits, including the most recent audit of the corrective action program, departmental self-assessments, and assessments conducted by independent organizations. These reviews were performed to determine if problems identified through these assessments were entered into the CAP, when appropriate, and whether corrective actions were initiated to address identified deficiencies. The effectiveness of the audits and assessments was evaluated by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

The inspectors also reviewed the most recent Nuclear Safety Culture Assessment report and discussed actions taken and planned with Entergy management in order to determine if appropriate action had been taken to address identified issues. A list of documents reviewed is included in the Attachment to this report.

# (2) Assessment

The inspectors concluded that self-assessments, QA audits, and other assessments were critical, thorough, and effective in identifying issues. The inspectors observed that these audits and self assessments were completed in a methodical manner by personnel knowledgeable in the subject. The audits and self-assessments were completed to a sufficient depth to identify issues that were entered into the CAP for evaluation. Corrective actions associated with the issues were implemented commensurate with their safety significance.

The inspectors determined that the Nuclear Safety Culture Assessment provided insights into the safety culture of the site workforce. Vermont Yankee managers evaluated the results and initiated appropriate actions to focus on areas identified for improvement.

### (3) <u>Findings</u>

No findings of significance were identified associated with assessments and audits.

d. Assessment of Safety-Conscious Work Environment (SCWE)

### (1) Inspection Scope

During interviews and discussions with station personnel, the inspectors assessed whether workers were willing to enter issues into the corrective action program and to raise safety concerns to their management and/or the NRC. The inspectors held discussions with staff and supervisors regarding use of the corrective action program, work processes, and other problem identification and resolution activities. The inspectors specifically interviewed the General Manager of Plant Operations; Director, Nuclear Safety Assurance; Quality Assurance Manager; Corrective Actions and Assessment Manager; and Employee Concerns Coordinator to assess their participation and roles in the corrective action program, work process, and alternative program for raising safety concerns.

The inspectors reviewed the Employee Concerns Program to assess whether employees were willing to use the program as an alternate path for raising concerns. Several Employee Concerns Program issues and evaluations were reviewed with respect to maintaining and promoting a safety-conscious work environment and to verify that issues affecting nuclear safety were being appropriately addressed. The inspectors assessed Entergy's management sensitivity to a safety-conscious work environment through inspection activities, discussions with management and Entergy's personnel, and attendance at various meetings. A list of documents reviewed is included in the Attachment to this report.

# (2) Assessment

Based on interviews, observations of plant activities, and reviews of the CAP and Employee Concerns Program, the inspectors determined that site personnel were willing to raise safety issues and document them in the CAP. Individuals actively utilized the CAP as evidenced by the number and significance of issues entered into the program. The inspectors noted that CRs were written by a variety of personnel, from workers to managers. Employee Concerns Program evaluations were thorough and appropriate actions were taken to address issues.

### (3) Findings

No findings of significance were identified related to the safety conscious work environment at Vermont Yankee.

# 4OA6 Meetings, Including Exit

On November 9, 2007, the team presented the inspection results to Mr. W. Maguire and other members of his staff, who acknowledged the observations. The inspectors confirmed that no proprietary information reviewed during inspection was retained by the team.

ATTACHMENT: Supplemental Information

#### SUPPLEMENTAL INFORMATION

# **KEY POINTS OF CONTACT**

### **Entergy**

E. Harms
 G. Losier
 W. Penniman
 J. Stasolla
 Assistant Operations Manager
 Corrective Actions Manager
 Technical Support Coordinator
 Maintenance Rule Coordinator

B. Vita Operations Department Performance Improvement Coordinator (DPIC)

G. Von der Esch Acting Operations Manager

W. Maguire General Manager, Plant Operations

P. Corbertt Quality Assurance Manager
S. Naeck Superintendent of Work Control
D. McElwee Employee Concerns Coordinator

R. Wanczyk Site Lead, Transition

J. Rogers Operating Experience Manager

H. Breite System Engineer
D. Mannai Licensing Manager

J. Dreyfuss Director, Nuclear Safety and Assurance

L. Kitchen
 N. Rademacher
 S. Jonash
 P. Rainey
 Maintenance Manager
 Engineering Director
 System Engineer
 Design Engineer

B. Smith Sr. Maintenance Engineer

### NRC and Other

R. Powell Branch Chief, DRP

R. Fernandes Senior Resident Inspector

M. Gray Branch Chief, DRP

U. Vanags Vermont Department of Public Service

### LIST OF DOCUMENTS REVIEWED

### Assessments and Audits

# <u>Audits</u>

QA-16-2005-VY-2 Security

QA-04-2006-VY-1 Engineering (Design Control)

QA-07-2006-VY-1 Emergency Planning QA-08-2006-VY-1 Engineering Programs

QA-10-2006-VY-1 Maintenance

QA-14-2006-VY-1 Radiation Protection QA-18-2006-VY-1 Technical Specifications

QA-12-2007-VY-1 Operations

### QA-03-2007-VY-1 Corrective Action Program

# **Quality Assurance Surveillance**

QS-2007-VY-027, Followup to Document Control and Records Audit QA-05-2006-VY-1

# Self-Assessments

LO-VTYLO-2004-0601 Foreign Material Exclusion

LO-VTYLO-2005-0358 Radiation Protection

LO-VTYLO-2005-0360 Operations Tagging Performance

LO-VTYLO-2005-0388 Human Performance Self Assessment

LO-VTYLO-2005-0390 Emergency Planning

LO-VTYLO-2006-0069 System Engineering Core Business Functions Self Assessment

LO-VTYLO-2007-00029 Quality Assurance Program

LO-VTYLO-2007-00145 Corrective Action Program

LO-WPOLO-2007-00001 Operating Experience

LO-VTYLO-2007-00024 Control of Supplemental Personnel

LO-VTYLO-2006-00144 Exercise Readiness

Condition Reports			
2004-2655	2006-0989	2007-0006	2007-1536
2004-2918	2006-1028	2007-0019	2007-1632
2004-2977	2006-1029	2007-0020	2007-1932
2004-3471	2006-1040	2007-0021	2007-2022
2005-1887	2006-1058	2007-0098	2007-2026
2005-0925	2006-1120	2007-0132	2007-2075
2005-1247	2006-1129	2007-0112	2007-2204
2005-2879	2006-1134	2007-0154	2007-2212
2005-2883	2006-1174	2007-0159	2007-2256
2005-2919	2006-1243	2007-0213	2007-2269
2005-2921	2006-1249	2007-0230	2007-2420
2005-2925	2006-1446	2007-0245	2007-2540
2005-2933	2006-1485	2007-0246	2007-2666
2005-3073	2006-1508	2007-0311	2007-2708
2005-3130	2006-1532	2007-0357	2007-2717
2005-3214	2006-1909	2007-0369	2007-2754
2005-3234	2006-2256	2007-0385	2007-2755
2005-3255	2006-2271	2007-0470	2007-2864
2005-3299	2006-2294	2007-0483	2007-2866
2005-3390	2006-2525	2007-0486	2007-3038
2005-3442	2006-2548	2007-0504	2007-3058
2005-3452	2006-2557	2007-0530	2007-3173
2005-3562	2006-2583	2007-0556	2007-3274
2005-3585	2006-2600	2007-0571	2007-3294
2005-3622	2006-2667	2007-0598	2007-3314
2005-3629	2006-2723	2007-0645	2007-3475
2005-3760	2006-2863	2007-0669	2007-3980
2005-3854	2006-2989	2007-0723	2007-4029*
2005-3882	2006-3327	2007-0780	2007-4030

Attachment

		A-3	
2005-3887	2006-3474	2007-0886	2007-4044
2005-3905	2006-3542	2007-0922	2007-4181
2005-3912	2006-3567	2007-0923	2007-4214
2005-3968	2006-3606	2007-0924	2007-4224
2005-3981	2006-3654	2007-0925	2007-1346
2005-3989	2006-3697	2007-0926	2007-1543
2005-4025	2006-3848	2007-0994	2007-1616
2005-4120	2006-1996	2007-1078	2007-1936
2006-0056	2006-2163	2007-1083	2007-2106
2006-0064	2006-2184	2007-1101	2007-2493
2006-0069	2006-2310	2007-1244	2007-3071
2006-0189	2006-2330	2007-1283	2007-3230
2006-0213	2006-0831	2007-1285	2007-3232
2006-0253	2006-0987	2007-1291	2007-3330
2006-0282	2006-0988	2007-1335	2006-0465
2006-0290	2006-1038	2006-0491	
2006-0301	2006-1563	2006-0512	
2006-0316	2006-1856	2006-0564	
2006-0351	2006-1951	2006-0584	
2006-0409	2006-1972	2006-0679	

# <u>Drawings</u>

C-4056 Assembly of Torus Column Supports G-191172 Flow Drawing RHR System, Rev. 66

### Maintenance Work Orders

WO 51078843	Replace Loss of Field Relay on EDG-1A
WO 51080298	Implement ER 05-0445 on RBM-B
WO 51080299	Implement ER 05-0445 on RBM-A
WO 51080679	Inspect and Repair RHR Discharge Check Valve V10-48B
WO 51081091	Fabricate and Install Manual Handwheel For S-3-1A

### Non-Cited Violations and Findings

NCV 2006007-02	Inadequate Clogged Service Water Strainer Procedure
NCV 2007002-02	Inadequate Design Control Associated with CST Vortexing Analysis
NCV 2007002-03	Failure to Follow Procedure Results in Unplanned "A" EDG Shutdown
	and Unavailability

# **Operability Determinations**

CR 2007-4005, 4 flexible hoses found kinked connecting high pressure CO2 tanks to manifold CR 2007-4030, Emergency Diesel Generator Fuel Injector Yoke Cage Assembly Fasteners CR 2007-4216, "A" emergency diesel generator air start copper tube is outside the retaining clip

# **Operating Experience**

CR-CNS-2005-03267-RC, High Collective Radiation Occupational Dose CR-PNP-2005-01439-RC, Instrument Root Valve Misposition NRC21-H-2006-0004, Woodward 505 Controls

NRC Information Notice 05-01, Halon Fire Extinguishing System Piping Incorrectly Connected NRC Information Notice 05-04, Single-Failure and Fire Vulnerability of Redundant Electrical Safety Buses

NRC Information Notice 05-06, Failure to Maintain Alert and Notification System Tone Alert

NRC Information Notice 06-05, Possible Defect in Bussman KWN-R and KTN-R Fuses

Radio Capability and associated CR-VTY-2004-03471

WO-51070268-01, Check AC Ripple on EOL Capacitors

WO-03-003700-001, Remove Reinstall SP-52-V1D Actuator

WO-00103039-01, Replace EOL zone No. 14 Capacitor

WO-00122686-01, Timing FCV-6-12B

WO-51080719-03, Install Jumper per Temp Mod. EC-2222

# Policies, Procedures and Instructions

1 0110100; 1 100	Cadree and mediactions
AP 0152	Shift Turnover, Rev. 43
AP 0155	Current System Valve and Breaker Lineup and Identification, Rev. 75
AP 0205	Controlled Use of Monorails, Rev. 10
EN-EC-100	Guidelines for Implementation of the Employee Concerns Program
EN-HR-138	Executive Review Board Process, Rev. 0
EN-LI-102	Corrective Action Process, Rev. 10
EN-LI-104	Self-Assessment and Benchmark Process, Rev. 2
EN-LI-118	Root Cause Analysis Process, Rev. 7
EN-LI-119	Apparent Cause Evaluation (ACE) Process, Rev. 7
EN-LI-121	Entergy Trending Process, Rev. 6
EN-MA-111	Material Handling Program, Rev. 4
EN-MA-123	Identification and Trending of Rework, Rev. 0
EN-OE-111	Operating Experience Program, Rev. 3
EN-OP-104	Operability Determinations, Rev. 2
EN-OP-111	Operational Decision-Making Issue (ODMI) Process, Rev. 3
EN-QV-132	Site Executive Protocol Group, Rev. 0
EN-WM-100	Work Request Generation, Screening and Classification, Rev. 2
OP 0046	Installation and Repair of Fire Barriers, Penetration Seals, Fire Breaks, and Floor
	Seals, Rev. 12
OP 2121	Reactor Core Isolation Cooling System, Rev. 51
OP 4120	High Pressure Coolant Injection System Surveillance, Rev. 74
OP 4121	Reactor Core Isolation Cooling System Surveillance, Rev. 77
OP 4124	Residual Heat Removal and RHR Service Water System Surveillance, Rev. 112
OP 4126	Diesel Generators Surveillance, Rev. 82
OP 4210	Maintenance and Surveillance of Lead Acid Storage Batteries
OP 4391	LPCI/RHR System Flow Transmitter Loop Calibration, Rev. 10
OP 5223	EDG Maintenance, Rev. 24
PP 7206	Use of Lifting Systems, Rev. 5

# System Health Reports

Service Water, 2<sup>nd</sup> and 3<sup>rd</sup> Quarters 2007

EDG, 2<sup>nd</sup> Quarter 2007

### Miscellaneous

2007 Employee Concerns Program Contact Log

CEO 2007-00156, Nuclear Oversight Fleet Quarterly Report, Third Quarter 2007

Attachment

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Employee Concerns Program Newsletter Volume 1, Issue 2

**Nuclear Safety Culture Actions** 

NSA Monthly Performance Report – Vermont Yankee September 2007

SARB Package for Meeting 2007-07

Surveillance Procedure Improvement Plan [Operations], 3/18/07

VY CRG Meeting Agendas for 10/23/2007; 11/06/2007

VY Quarterly Trend Report First Quarter 2007

VY Quarterly Trend Report Second Quarter 2007

2006 Nuclear Safety Culture Assessment

LPCI/RHR System Flow Loop Accuracy Review, Calculation VYC-479, Rev. 4 Engineering Change 4077, Evaluation of Fairbanks Morse Part Change, 11/19/07

### LIST OF ACRONYMS

ACE Apparent Cause Evaluation

ADAMS Agency Wide Document and Management System

CAP Corrective Action Program
CARB Corrective Action Review Board

CCA Common Cause Analysis
CFR Code of Federal Regulations
CST Condensate Storage Tank

CR Condition Report

ECP Employee Concerns Program

NCV Non-Cited Violation

NRC Nuclear Regulatory Commission

ODMI Operational Decision-Making Issue Process

OE Operating Experience
PARS Publicly Available Records

PI&R Problem Identification and Resolution

RCA Root Cause Analysis

ROP Reactor Oversight Process

SCWE Safety-Conscious Work Environment

WO Work Order