



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

May 8, 2014

Mr. Christopher Wamser
Site Vice President
Entergy Nuclear Operations, Inc.
Vermont Yankee Nuclear Power Station
Vernon, VT 05354

**SUBJECT: VERMONT YANKEE NUCLEAR POWER STATION – NRC INTEGRATED
INSPECTION REPORT 05000271/2014002**

Dear Mr. Wamser:

On March 31, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Vermont Yankee Nuclear Power Station. The enclosed inspection report documents the inspection results, which were discussed on April 7, 2014, with Mr. Vincent Fallacara, General Manager of Plant Operations, and other members of your staff.

The 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.

This report documents one violation of NRC requirements, which was of very low safety significance (Green). However, because of the very low safety significance, and because it is entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section 2.3.2.a of the NRC Enforcement Policy. If you contest the NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Vermont Yankee Nuclear Power Station. In addition, if you disagree with the cross-cutting aspect assigned to the finding, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at Vermont Yankee Nuclear Power Station.

Additionally, as we informed you in the most recent NRC integrated inspection report, cross-cutting aspects identified in the last six months of 2013 using the previous terminology were being converted in accordance with the cross-reference in Inspection Manual Chapter 0310. Section 40A5 of the enclosed report documents the conversion of these cross-cutting aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with Inspection Manual Chapter 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, you should provide a response within 30 days of the date of this inspection report, with the basis for your

C. Wamser

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disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at the Vermont Yankee Nuclear Power Station

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRCs "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's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Raymond R. McKinley, Chief
Reactor Projects Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000271/2014002
w/Attachment: Supplementary Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No. 50-271

License No. DPR-28

Report No. 05000271/2014002

Licensee: Entergy Nuclear Operations, Inc.

Facility: Vermont Yankee Nuclear Power Station

Location: Vernon, VT 05354-9766

Dates: January 1, 2014 through March 31, 2014

Inspectors: S. Rutenkroger, PhD, Senior Resident Inspector, Division of Reactor
Projects (DRP)
S. Rich, Resident Inspector, DRP
E. Burket, Emergency Preparedness Inspector, Division of Reactor Safety

Approved by: Raymond R. McKinley, Chief
Reactor Projects Branch 5
Division of Reactor Projects

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SUMMARY

IR 05000271/2014002; 01/01/2014 – 03/31/2014; Vermont Yankee Nuclear Power Station; Maintenance Effectiveness.

This report covered a three-month period of inspection by resident inspectors and announced inspections performed by regional inspectors. One NRC-identified non-cited violation (NCV) of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)," dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Aspects Within the Cross-Cutting Areas," dated December 19, 2013. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated July 9, 2013. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

Cornerstone: Mitigating Systems

- Green. The inspectors identified an NCV of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," paragraph a(1), because Entergy did not evaluate the fire protection system for (a)(1) classification even though the unavailability performance criterion had been exceeded. Specifically, Entergy did not recognize that the fire water system to service water system crosstie function was risk-significant and that its unavailability (nine days in 2013 and 34 days in 2014) was required to be monitored. Entergy entered this issue into their corrective action program as condition report CR-VTY-2014-01064.

The inspectors determined that the failure to recognize that the fire water system to service water system crosstie function was risk-significant, to monitor the crosstie function's unavailability (nine days in 2013 and 34 days in 2014), and to evaluate the fire protection system for 10 CFR 50.65 (a)(1) classification was a performance deficiency that was reasonably within Entergy's ability to foresee and correct, and should have been prevented. This finding is more than minor because it is associated with the configuration control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, since Entergy personnel did not recognize that the risk-significant function was not being tracked against the unavailability performance criterion no actions were taken to address exceeding that criterion and no changes were made to the temporary pump design to reduce additional unavailability. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, the inspectors determined that this finding is of very low safety significance (Green) because the performance deficiency did not represent an actual loss of function of a non-technical specifications train of equipment designated as high safety-significant for greater than 24 hours. Specifically, the performance deficiency was not the underlying cause of the unavailability in 2013 or 2014. This finding has a cross-cutting aspect in the area of Human Performance because Entergy did not challenge the unknown reason why no system was accruing maintenance rule unavailability while the station was in an elevated risk condition, i.e. "Yellow," with the fire water pumps out of service. [H.11] (Section 1R12)

REPORT DETAILS

Summary of Plant Status

Vermont Yankee Nuclear Power Station (VY) began the inspection period operating at 100 percent power. On January 6, operators reduced power to 48 percent for a control rod pattern adjustment and returned VY to 100 percent power on January 7. On January 22, operators reduced power to 78 percent in order to maintain the main condenser backpressure within limits after a failed fuse affected steam jet air ejector operation and caused main condenser backpressure to increase. Operators returned VY to 100 percent power the same day after completing maintenance. On February 21, operators reduced power to 80 percent to replace failing seals on the "B" reactor feedwater pump. On February 23, operators reduced power to 40 percent to replace failing seals on the "A" reactor feedwater pump with the "B" reactor feedwater pump maintenance ongoing. On February 24, operators increased power to 85 percent after the "B" reactor feedwater pump maintenance was completed. On February 26, operators returned VY to 100 percent power after the "A" reactor feedwater pump maintenance was completed and maintained VY at or near 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – 2 samples)

.1 Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

The inspectors reviewed Entergy's preparations given a forecast of extremely cold weather (-15 degrees Fahrenheit, or less) on January 2. The inspectors reviewed the implementation of adverse weather preparation procedures before and following the onset of this adverse weather condition. The inspectors walked down the emergency diesel generators, the intake structure, and freeze protection panels to ensure system availability. The inspectors verified that operator actions defined in Entergy's adverse weather procedure maintained the readiness of essential systems. The inspectors discussed readiness and staff availability for adverse weather response with operations personnel. Documents reviewed for each section of this inspection report are listed in the Attachment.

b. Findings

No findings were identified.

.2 External Flooding

a. Inspection Scope

On March 12, the inspectors performed an inspection of the external flood protection measures for VY. The inspectors reviewed technical specifications, procedures, and the

Updated Final Safety Analysis Report (UFSAR), which depicted the design flood levels and protection areas containing safety-related equipment to identify areas that may be affected by external flooding. The inspectors conducted a general site walkdown of all external areas of the plant, including the administration building, auxiliary building, reactor building, and turbine building to ensure that Entergy established flood protection measures in accordance with design specifications. The inspectors also reviewed operating procedures for mitigating external flooding during severe weather to determine if Entergy planned or established adequate measures to protect against external flooding events.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

Partial System Walkdowns (71111.04 – 3 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- Uninterruptible power supply (UPS) “1B” during UPS “1A” planned maintenance on January 7
- Fire water system with fire water outer loop leakage from January 26 to 31
- Standby liquid control system following surveillance testing on March 26

The inspectors selected these systems based on their risk-significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the UFSAR, technical specifications, condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted system performance of their intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed whether Entergy staff had properly identified equipment issues and entered them into the corrective action program for resolution with the appropriate significance characterization.

b. Findings

No findings were identified.

.2 Full System Walkdown (71111.04S – 1 sample)

a. Inspection Scope

On February 20, March 3, and March 4, the inspectors performed a complete system walkdown of accessible portions of the “A” train of the residual heat removal (RHR) system to verify the existing equipment lineup was correct. The inspectors reviewed

operating procedures, drawings, equipment line-up check-off lists, and the UFSAR to verify the system was aligned to perform its required safety functions. The inspectors also reviewed electrical power availability, component lubrication and equipment cooling, hanger and support functionality, and operability of support systems. The inspectors performed field walkdowns of accessible portions of the system to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed the system health report and related condition reports. Additionally, the inspectors reviewed condition reports related to component misalignment to ensure Entergy appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Resident Inspector Quarterly Walkdowns (71111.05Q – 5 samples)

a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that Entergy controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression equipment was available for use as specified in the area pre-fire plan, and passive fire barriers were maintained in good material condition. The inspectors also verified that station personnel implemented compensatory measures for out of service, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- High pressure coolant injection (HPCI) room and southwest corner room, elevations 213' and 232', on January 18
- "A" emergency diesel generator room on January 23
- "B" emergency diesel generator room on January 30
- Intake structure on February 11
- Fuel oil storage tank transfer pump house on March 17

b. Findings

No findings were identified.

.2 Fire Protection – Drill Observation (71111.05A – 1 sample)

a. Inspection Scope

The inspectors observed a fire brigade drill scenario conducted on March 4 that involved a fire in the cable vault, elevation 260' 6". The inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that Entergy personnel identified

deficiencies, openly discussed them in a self-critical manner at the debrief, and took appropriate corrective actions as required. The inspectors verified that the fire brigade:

- Properly used turnout gear and self-contained breathing apparatus
- Properly used and laid out fire hoses
- Employed appropriate fire-fighting techniques
- Brought sufficient fire-fighting equipment to the scene
- Effectively used command and control
- Searched for victims and for propagation of the fire into other plant areas
- Conducted smoke removal operations
- Properly used pre-planned strategies
- Adhered to the pre-planned drill scenario
- Met drill objectives

The inspectors also evaluated the fire brigade's actions to determine whether these actions were in accordance with Entergy's fire-fighting strategies.

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)

Internal Flooding Review

a. Inspection Scope

The inspectors reviewed the UFSAR, the site flooding analysis, and drawings to assess susceptibilities involving internal flooding. The inspectors also reviewed the corrective action program to determine if Entergy identified and corrected flooding problems and whether operator actions for coping with flooding were adequate. The inspectors focused on the emergency diesel generator rooms to verify the adequacy of equipment seals located below the flood line, floor and water penetration seals, and common drain lines.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11 – 2 samples)

.1 Quarterly Review of Licensed Operators' Regualification Testing and Training

a. Inspection Scope

The inspectors observed licensed operator simulator training on December 31, 2013, which involved rapid power reduction using recirculation flow, response to an anticipated transient without scram, and control of reactor vessel water level during emergency depressurization. The training was provided to two licensed senior reactor operators who would be assigned reactor operator duties. The inspectors assessed the clarity and

effectiveness of communications, implementation of actions in response to alarms and changing plant conditions, and control of plant parameters. Additionally, the inspectors assessed the ability of the training staff to identify and document operator performance problems.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Room

a. Inspection Scope

The inspectors observed control room operators on January 6 during a planned transfer of the vital alternating current (AC) supply from the vital AC motor generator (MG) set to the alternate supply and back for maintenance on the vital AC MG set tachometer. The inspectors observed the pre-job brief to verify that roles and responsibilities, critical steps, expected results, and hold points were discussed. The inspectors verified that procedure use, crew communications, and response to alarms met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12Q – 3 samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system and component (SSC) performance and reliability. The inspectors reviewed system health reports, corrective action program documents, maintenance work orders, and maintenance rule basis documents to ensure that Entergy was identifying and properly evaluating performance problems within the scope of the maintenance rule. For each sample selected, the inspectors verified that the SSC was properly scoped into the maintenance rule in accordance with 10 CFR 50.65 and verified that the (a)(2) performance criteria established by Entergy staff were reasonable. Additionally, the inspectors ensured that Entergy staff was identifying and addressing common cause failures that occurred within and across maintenance rule system boundaries.

- Residual heat removal service water (RHRSW) system
- Fire water system to service water system crosstie function
- 480 volts AC electrical system

b. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," paragraph a(1), because Entergy did not evaluate the fire protection system for (a)(1) classification even though the unavailability performance criterion had been exceeded. Specifically,

Entergy did not recognize that the fire water system to service water system crosstie function was risk-significant and that its unavailability (nine days in 2013 and 34 days in 2014) was required to be monitored.

Description. In the event of a station blackout, or other circumstances that impact the service water pumps and RHR pumps, the fire water pumps can be crosstied to the service water system via a manual valve in the intake structure. This crosstie would allow the fire water pumps to be used to support the service water function, as well as provide water injection into the reactor vessel using another crosstie from the RHRSW system to the RHR system. The diesel fire water pump is its own source of power, and the electric fire water pump can be powered from a different power source than the service water pumps. So the fire water system provides a diverse source of water for plant risk reduction.

The crosstie function was discussed in both the service water system and fire protection system maintenance rule scoping documents. In the service water scoping document, the function was classified as low risk significance, and therefore unavailability of this crosstie function was not monitored in the service water system. In the fire protection scoping document, the function to provide an alternate water supply to the service water system utilizing the electric and diesel fire water pumps via the service water crosstie was classified as high risk significance. Based on the service water system scoping document, Entergy staff believed that fire suppression capability was risk significant, not the crosstie capability. So, Entergy staff did not enter any unavailability. However, the inspectors reviewed the probabilistic safety assessment and determined that the crosstie function is of high risk significance.

On February 21, 2013, Entergy removed the electric and diesel fire water pumps from service and danger-tagged shut the crosstie valve in order to allow maintenance on valves in the fire suppression system. The fire suppression system was maintained functional through temporary pumps, but those pumps were unable to connect to the service water system. During the course of the maintenance, the work scope was expanded due to greater than expected degradation of the valves, and the pumps and crosstie valve were not returned to service until March 2, 2013. The ability of the fire water pumps to provide water to the service water and RHR systems was unavailable for nine days. During this time, Entergy recognized the risk impact by elevating the station risk to "Yellow" and taking appropriate risk management actions. However, Entergy did not recognize that a maintenance rule function required to be monitored was lost, did not enter the unavailability into the maintenance rule database, and did not recognize that a performance criterion was exceeded.

On February 2, 2014, Entergy removed the diesel and electric fire water pumps from service and danger-tagged shut the crosstie valve in order to support emergent maintenance on valves in the fire water yard loop. Again, the fire water system was maintained functional through temporary pumps which were set up following a design based on the installation in 2013. On March 8, the fire water system was returned to service. The function of the fire water pumps to provide water to the service water and RHR systems was unavailable for 34 days.

Prior to designing the temporary fire pump system in 2014, Entergy reviewed their previous design and made changes and improvements based on their experience from 2013. Because the impact on the risk-significant function was not recognized in 2013,

Entergy did not consider modifying the temporary system to provide that mitigating function and reduce the unavailability time. Neither time did Entergy staff question why removing the two fire pumps from service resulted in “Yellow” station risk but had no effect on maintenance rule unavailability. Entergy staff initiated condition report CR-VTY-2014-01064 to perform an apparent cause evaluation and develop corrective actions.

Analysis. The inspectors determined that the failure to recognize that the fire water system to service water system crosstie function was risk-significant, to monitor the crosstie function’s unavailability (nine days in 2013 and 34 days in 2014), and to evaluate the fire protection system for 10 CFR 50.65 (a)(1) classification was a performance deficiency that was reasonably within Entergy’s ability to foresee and correct, and should have been prevented. This finding is more than minor because it is associated with the configuration control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, since Entergy personnel did not recognize that the risk-significant function was not being tracked against the unavailability performance criterion no actions were taken to address exceeding that criterion and no changes were made to the temporary pump design to reduce additional unavailability.

In accordance with IMC 0609.04, “Initial Characterization of Findings,” and Exhibit 2 of IMC 0609, Appendix A, “The Significance Determination Process for Findings At-Power,” issued June 19, 2012, the inspectors determined that this finding is of very low safety significance (Green) because the performance deficiency did not represent an actual loss of function of a non-technical specifications train of equipment designated as high safety-significant for greater than 24 hours. Specifically, the performance deficiency was not the underlying cause of the unavailability in 2013 or 2014.

This finding has a cross-cutting aspect in the area of Human Performance because Entergy did not challenge the unknown reason why no system was accruing maintenance rule unavailability while the station was in an elevated risk condition, i.e. “Yellow,” with the fire water pumps out of service [H.11].

Enforcement. 10 CFR 50.65 (a)(1) requires, in part, that licensees shall monitor the performance or condition of SSCs, within the scope of the rule as defined by 10 CFR 50.65 (b), against licensee-established goals, in a manner sufficient to provide reasonable assurance that such SSCs are capable of fulfilling their intended functions. 10 CFR 50.65(a)(2) states, in part, that monitoring as specified in 10 CFR 50.65 (a)(1) is not required where it has been demonstrated that the performance or condition of an SSC is being effectively controlled through the performance of appropriate preventive maintenance, such that the SSC remains capable of performing its intended function. Entergy procedure EN-DC-205, “Maintenance Rule Monitoring,” requires that the affected SSC be evaluated for (a)(1) classification when an unavailability performance criterion has been exceeded. Contrary to this, from March 2, 2013, to March 8, 2014, Entergy failed to evaluate the fire water system, within the scope of the rule as defined by 10 CFR 50.65 (b), for (a)(1) classification when the unavailability performance criterion was exceeded and failed to monitor the fire water system in a manner sufficient to provide reasonable assurance that the system was capable of fulfilling its intended function to cross-tie to the service water system. Because this issue was of very low safety significance (Green), and Entergy entered this issue into their corrective action

program as condition report CR-VTY-2014-01064, this violation is being treated as an NCV, consistent with Section 2.3.2.a of the Enforcement Policy. **(NCV 05000271/2014002-01, Failure to Monitor the Unavailability of the Fire Water to Service Water Crosstie)**

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 4 samples)

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that Entergy performed the appropriate risk assessments prior to removing equipment for work. The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that Entergy personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When Entergy performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's work week manager to verify plant conditions were consistent with the risk assessment. The inspectors also reviewed the technical specification requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- "B" emergency diesel generator surveillance, "B" core spray pump planned maintenance, and "B" reactor building closed loop cooling water heat exchanger planned maintenance – week of January 13
- "D" RHR system pump unavailable due to check valve maintenance – week of January 20
- Alternate temporary fire water pump system installed – week of February 3
- "A" emergency diesel generator surveillance concurrent with electric and diesel fire pump unavailability – week of March 3

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 3 samples)

a. Inspection Scope

The inspectors reviewed operability determinations or functionality assessments for the following degraded or non-conforming conditions:

- HPCI turbine cooling water pressure relief valve leak, condition report CR-VTY-2013-06864 initiated on December 18
- Fire protection water outer loop header leak, condition report CR-VTY-2014-00359 initiated on January 24
- Excessive nitrogen flow, condition report CR-VTY-2013-03307 initiated on February 25

The inspectors selected these issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the operability determinations and functionality assessments to assess whether technical specification operability was properly justified, as applicable, and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the technical specifications and UFSAR to Entergy's evaluations to determine whether the components or systems were operable or functional. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18 – 2 samples)

.1 Temporary Modifications

a. Inspection Scope

The inspectors reviewed the temporary modifications listed below to determine whether the modifications affected the safety functions of systems that are important to safety. The inspectors reviewed 10 CFR 50.59 documentation and post-modification testing results, and conducted field walkdowns of the modifications to verify that the temporary modifications did not degrade the design bases, licensing bases, and performance capability of the affected systems.

- Engineering Change 48330 – Shift load for standby gas system CRP 9-26 from AC-DP-5 circuit 4 to circuit 18, phase C
- Engineering Change 48805 – Temporary fire pumps to support repair of the fire protection outer loop header leak

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 7 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests for the maintenance activities listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure were consistent with the information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed test data to verify that the test results adequately demonstrated restoration of the affected safety functions.

- “B” core spray pump seal replacement on January 15
- “D” RHR check valve repair on January 24
- Installation of insert valve FP-100B in outer fire protection water loop on February 25
- Installation of insert valve FP-104B in outer fire protection water loop on February 25
- “A” reactor feedwater pump seal replacements on February 27
- Buried fire protection water outer loop valves V76-100, V76-106, and V76-107 removal and replacement with flanged pipe sections (V76-100 and V76-106) and a new valve (V76-107) from January 24 to March 8
- “A” service water pump motor feeder breaker repair on March 18

b. Inspection Scope

No findings were identified.

1R22 Surveillance Testing (71111.22 – 6 samples)

a. Inspection Scope

The inspectors observed performance of surveillance tests and reviewed test data of selected risk-significant SSCs to assess whether test results satisfied technical specifications, the UFSAR, and Entergy’s procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- “A” RHR and RHRSW quarterly surveillance on January 8
- Station blackout diesel generator quarterly surveillance on January 30
- HPCI suction transfer on condensate storage tank low level instrumentation test and calibration on February 26
- “A” emergency diesel generator semi-annual fast start surveillance on March 6
- Reactor coolant system leakage detection on March 11
- HPCI pump quarterly surveillance on March 19

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04 – 1 sample)

a. Inspection Scope

Entergy implemented various changes to the VY Emergency Action Levels (EALs), Emergency Plan, and implementing procedures. Entergy had determined that, in accordance with 10 CFR 50.54(q)(3), any change made to the EALs, Emergency Plan,

and its lower-tier implementing procedures, had not resulted in any reduction in effectiveness of the Emergency Plan, and that the revised Emergency Plan continued to meet the standards in 50.47(b) and the requirements of 10 CFR 50, Appendix E.

The inspectors performed an in-office review of all EAL and Emergency Plan changes submitted by Entergy as required by 10 CFR 50.54(q)(5), including the changes to lower-tier emergency plan implementing procedures, to evaluate for any potential reductions in effectiveness of the Emergency Plan. This review by the inspectors was not documented in an NRC Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety. The requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06 – 1 sample)

a. Inspection Scope

The inspectors evaluated the conduct of a routine Entergy emergency drill on February 26 to identify any weaknesses and deficiencies in the classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator and emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the drill critique in the emergency operations facility to compare inspector observations with those identified by Entergy staff in order to evaluate Entergy's critique and to verify whether the Entergy staff was properly identifying weaknesses and entering them into the corrective action program.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Initiating Events Cornerstone (3 samples)

a. Inspection Scope

The inspectors reviewed Entergy's submittals and performance indicator data for the indicators listed below for the period from January 2013 through December 2013. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7. The inspectors reviewed Entergy's operator narrative logs, operability assessments,

maintenance rule records, condition reports, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

- Unplanned Scrams
- Unplanned Power Changes
- Unplanned Scrams with Complications

b. Findings

No findings were identified.

.2 Reactor Coolant System Specific Activity and Reactor Coolant System Leak Rate (2 samples)

a. Inspection Scope

The inspectors reviewed Entergy's submittal for the reactor coolant system specific activity and reactor coolant system leak rate performance indicators for the period of April 2013 through December 2013. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7. The inspectors also reviewed reactor coolant system sample analysis and control room logs of daily measurements of reactor coolant system leakage, and compared that information to the data reported by the performance indicator. Additionally, the inspectors observed surveillance activities that determined the reactor coolant system identified leakage rate, and chemistry personnel taking a reactor coolant system sample.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that Entergy entered issues into their corrective action program at an appropriate threshold, gave adequate attention to timely corrective actions, and identified and addressed adverse trends. In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the corrective action program and periodically attended condition report review group meetings.

b. Findings

No findings were identified.

4OA3 Follow-up of Events and Notices of Enforcement Discretion (71153 – 1 sample)(Closed) Licensee Event Report (LER) 0500027/2013-002-00: Potential to Flood Switchgear Rooms Due to Missing Conduit Flood Seal

On November 6, 2013, Entergy discovered a conduit with a loose mechanical screw-type seal and a conduit with no seal inside manhole S2 during a scheduled surveillance of flood seals. The conduits are required to be sealed to block a flood water pathway into the east and west switchgear rooms. On November 7, the conduits were sealed with a silicone elastomer to restore compliance. The enforcement aspects of this issue were documented in Inspection Report 05000271/2013005, ML14037A334. The inspectors did not identify any new issues during the review of the LER. This LER is closed.

4OA5 Other Activities

The table below provides a cross-reference from the last six months of 2013 of findings and associated cross-cutting aspects to the new cross-cutting aspects resulting from the common language initiative. These aspects and any others identified since January 2014, will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review.

Finding	Old Cross-Cutting Aspect	New Cross-Cutting Aspect
05000271/2013004-01	H.4 (b)	H.8
05000271/2013004-02	H.3 (a)	H.5
05000271/2013004-03	H.4 (a)	H.12
05000271/2013005-01	H.2 (c)	H.7
05000271/2013005-02	H.1 (a)	H.13

4OA6 Meetings, Including Exit

On April 7, 2014, the inspectors presented the inspection results to Mr. Vincent Fallacara, General Manager of Plant Operations, and other members of the Entergy staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION**KEY POINTS OF CONTACT**Vermont Yankee Personnel

C. Wamser, Site Vice President
 V. Fallacara, General Manager of Plant Operations
 M. Romeo, Director of Regulatory and Performance Improvement
 J. Boyle, Engineering Director
 R. Felumb, Performance Improvement Manager
 P. Corbett, Nuclear Oversight Manager
 J. Hardy, Chemistry Manager
 D. Jones, Senior Operations Manager
 M. McKenney, Emergency Preparedness Manager
 P. Paradis, Senior Maintenance Manager
 J. Rogers, Design Engineering Manager
 P. Ryan, Security Manager
 K. Stupak, Manager, Training and Development
 D. Tkatch, Radiation Protection Manager
 C. Chappell, Regulatory Assurance Manager
 A. Zander, Shift Manager
 K. O'Neil, Workweek Manager
 L. Derting, RP Supervisor
 J. Gaboriault, Planning Supervisor
 C. Daniels, FIN Superintendent
 W. Manning, Control Room Supervisor
 R. Swanson, System Engineering Supervisor
 J. Merkle, System Engineering Manager
 R. Busick, Assistant Operations Manager
 R. Bettini, Electrical Maintenance Supervisor
 R. Mauthe, Instrumentation and Controls Supervisor
 M. Whipple, Chemistry Supervisor

LIST OF ITEMS OPENED, CLOSED, DISCUSSED AND UPDATEDOpened/Closed

05000271/2014-002-01	NCV	Failure to Monitor the Unavailability of the Fire Water to Service Water Crosstie (Section 1R12)
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Closed

05000271/2013-002-00	LER	Potential to Flood Switchgear Rooms Due to Missing Conduit Flood Seal (Section 4OA3)
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LIST OF DOCUMENTS REVIEWED

In addition to the documents identified in the body of this report, the inspectors reviewed the following documents and records.

Vermont Yankee Nuclear Power Station Updated Final Safety Analysis Report
 Vermont Yankee Nuclear Power Station Technical Specifications
 Vermont Yankee Nuclear Power Station Narrative Logs, Night Orders, and Standing Orders
 Vermont Yankee Nuclear Power Station Equipment Out of Service (EOOS) Risk Model
 Vermont Yankee Nuclear Power Station Workweek Schedules

Section 1R01: Adverse Weather Protection

Procedures

OP 2127, "John Deere Diesel Generator System," Revision 23
 OPOP-480V-2143, "480 and Lower Voltage AC System (Except Vital Inst. AC and Lighting Panels)," Revision 3
 OP 5229, "Inspection and Testing of the GE 480 VAC Switchgear," Revision 14
 OPOP-PHEN-3127, "Natural Phenomena," Revision 14

Condition Reports

CR-VTY-2014-00023	CR-VTY-2014-00031	CR-VTY-2014-01082
CR-VTY-2014-00030	CR-VTY-2014-00085	

Miscellaneous

OPOP-PHEN-3127, Attachment 4, "Extreme Low Temperature Walkdown Check Sheet," completed 1/2/14 - 1/4/14
 OP 2196, Attachment 1, "Cold Weather Initiation Operations Checklist," completed 1/3/14

Section 1R04: Equipment Alignment

Procedures

OPOP-480V-2143, "480 and Lower Voltage AC System (Except Vital Inst. AC and Lighting Panels)," Revision 3
 OPOP-RHR-2124, "Residual Heat Removal System," Revision 10
 OPOP-48V-2143, "480 and Lower Voltage AC System," Revision 3
 OP 4114, "Standby Liquid Control System Surveillance," Revision 74
 OP 2114, "Flow Diagram Standby Liquid Control System," Revision 29

Condition Reports

CR-VTY-2013-04382	CR-VTY-2013-06552	CR-VTY-2014-01092
CR-VTY-2013-04432	CR-VTY-2014-00008	CR-VTY-2014-01214
CR-VTY-2013-05254	CR-VTY-2014-00089	CR-VTY-2014-01215
CR-VTY-2013-05891	CR-VTY-2014-00308	

Drawings

G-191163, "Flow Diagram Fire Protection System Outer Loop," Revision 15
 G-191159, Sheet 1, "Flow Diagram Service Water System," Revision 88
 G-191172, "Flow Diagram Residual Heat Removal system," Revision 73
 G-191159, Sheet 2, "Flow Diagram Service Water System," Revision 97
 G-191171, "Flow Diagram Standby Liquid Control System," Revision 29

Miscellaneous

EN-MA 125, Attachment 9.3, "Troubleshooting Control of Maintenance Activities," completed 1/26/14

Section 1R05: Fire Protection

Procedures

OP 4019, "Surveillance of Plant Fire Barriers and Fire Rated Assemblies," Revision 31
OPAP-BCP-0077, "Barrier Control Process," Revision 2
VTY-EN-TQ-125, "Fire Brigade Drills," Revision 2

Pre-Fire Plans

PFP-TB-5, "Elevation 252' – 6" Diesel Generator Rooms," Revision 4
PFP-RB-8, "Elevation 232' - 6" Torus (South)," Revision 4
PFP-RB-10, "Elevation 213' - 9" Torus (South)," Revision 4
PFP-RB-12, "Elevation 213' – 9" HPCI Pump Room," Revision 4
PFP-IS, "Intake, Elevation 237," Revision 4

Condition Reports

CR-VTY-2014-00240 CR-VTY-2014-00439 CR-VTY-2014-00576

Drawings

B-191500, Sheet 324, "Fire Barrier Seal Drawing – Fire Barrier Number 62," Revision 1

Miscellaneous

"Fire Hazards Analysis," Revision 14
Tagout 480A-012-A-BUS11-6D BUR
Tagout 480A-012-B-BUS11-6D BUR
Tagout 480A-012-C-BUS11-6D BUR
BCP-2014-07, "Open Doors to Enable Continuous Fire Watch"
SIP-2013-09, "MCC-8D Cubicle Inspection"
SIP-2014-05, "Implement EC-48805"
NFPA 27, "Private Fire Brigades," 1981
Fire Drill Scenario, 3/4/14
EC 23920, "Turbine Building 252' EI East Intrusion Barrier"

Section 1R06: Flood Protection Measures

Drawings

G-191665, "Turbine Building Riser diagrams – Plumbing and Drainage," Revision 9
G-191662, "Turbine Building Ground Floor Plan – Plumbing and Drainage," Revision 18

Miscellaneous

IF, "Internal Flooding Topical Design Basis Document," Revision 9
Individual Plant Examination for External Events

Section 1R11: Licensed Operator Regualification Program

Procedures

EN-OP-115, "Conduct of Operations," Revision 14

OP 2123, "Core Spray," Revision 45
 OPOP-RHR-2124, "Residual Heat Removal System," Revision 9
 OP 2115, "Primary Containment," Revision 84
 OP 2144, "120/240 VAC Vital Bus," Revision 46
 EOP-2, "ATWS RPV Control," Revision 8

Section 1R12: Maintenance Effectiveness

Procedures

OPOP-RHR-2124, "Residual Heat Removal System," Revision 7
 OE 3107, "EOP/SAG Appendices," Revision 29
 OE 3148, "Loss of Service Water," Revision 18
 OPST-RHR-4124-11A, "RHRSW Loop "A" Valve Operability Test," Revision 0
 EN-DC-204, "Maintenance Rule Scope and Basis," Revision 3
 VTY-EN-DC-204, "Maintenance Rule Scope and Basis," Revision 3
 VTY-EN-DC-205, "Maintenance Rule Monitoring," Revision 5

Condition Reports

CR-VTY-2010-05239	CR-VTY-2013-01629	CR-VTY-2013-06257
CR-VTY-2011-01713	CR-VTY-2013-01870	CR-VTY-2013-06994
CR-VTY-2011-03744	CR-VTY-2013-01933	CR-VTY-2014-00583
CR-VTY-2011-03971	CR-VTY-2013-02067	CR-VTY-2014-01064
CR-VTY-2012-03411	CR-VTY-2013-02169	CR-VTY-2014-01086
CR-VTY-2012-04536	CR-VTY-2013-02678	
CR-VTY-2013-00033	CR-VTY-2013-02731	

Miscellaneous

480V AC System Health Report, Q3-2013
 480V AC System Health Report, Q4-2013
 480AC, "Design Basis Document for Safety Related 4.16KV / 480 Volt System," Revision 25
 480AC, "Scoping Basis Document 480 Volts AC Electrical (480AC)," Revision 6
 Fire Protection SSC Performance History, 3/1/11 through 2/28/14
 FP, "Scoping Basis Document – Fire Protection," Revision 5 and Revision 7
 Residual Heat Removal Service Water System Health Report, Q3-2013
 Residual Heat Removal Service Water System SSC Performance History, 1/1/11 through
 12/31/13
 RHR Service Water State of the System Report, 12/31/13
 SW, "Scoping Basis Document – Service Water," Revision 8
 VTY-NE-11-00001, "Vermont Yankee Nuclear Power Station Probabilistic Safety Assessment,"
 Revision 0

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Procedures

AP 0172, "Work Schedule Risk Management – Online," Revision 27
 EN-OP 119, "Protected Equipment Postings," Revision 6
 EN-DC-127, "Control of Hotwork and Ignition Sources," Revision 13
 VTY-EN-OP-116, "Infrequently Performed Tests or Evolutions," Revision 12
 OPOP-480V-2143, "480 and Lower Voltage AC System," Revision 3
 VY-EN-OP-119, "Protected Equipment Postings," Revision 6
 AP 0172, "Work Schedule Risk Management – On-Line," Revision 27

VTY-EN-WM-104, "On Line Risk Assessment," Revision 9

Miscellaneous

VYAPF 0172.02, "Risk Management Worksheet," completed 1/13/14
VYAPF 0172.02, "Risk Management Worksheet," completed 1/16/14
WW 1402 System Schedule
WW 1403 System Schedule
WW 1405 System Schedule
WW 1409 System Schedule
NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Revision 4A
Individual Plant Examination for External Events
VTY-EN-WM-104, Attachment 9.3, "On-Line Risk Assessment Integrated Risk Summary Form," WW 1409
VYAPF 0172.01, "On-Line Maintenance Safety Assessment Review," 3/6/14

Section 1R15: Operability Determinations and Functionality Assessments

Procedures

OP 2120, "High Pressure Coolant Injection System," Revision 62
EN-OP-111, Attachment 9.2, "Excessive Nitrogen Flow," Revision 1

Drawings

G-191163, Sheet 2, "Flow Diagram Fire Protection System Outer Loop," Revision 15
G-191169, Sheet 2, "Flow Diagram High Pressure Coolant Injection System," Revision 45

Condition Reports

CR-VTY-2013-06864	CR-VTY-2014-00363	CR-VTY-2014-00739
CR-VTY-2013-06876	CR-VTY-2014-00366	CR-VTY-2014-00807
CR-VTY-2014-00359	CR-VTY-2014-00373	
CR-VTY-2014-00361	CR-VTY-2014-00444	

Miscellaneous

HPCI, "Design Basis Document for High Pressure Coolant Injection System," Revision 34
VYG-2601, "Vermont Yankee Nuclear Project Steam Relief and Isolation Valve Accumulators," May 7, 1970
EC-45804, "Provide Rotameter with Larger Range to Quantify CA Drywell Leak"
VYS-98/150, "Closeout of Commitments ER-98-1176_02, _03, _04 MSIV Accumulator Sizing Concerns," 12/15/98
EN-MA-125, Attachment 9.3, "Troubleshooting Control of Maintenance Activities," completed 1/26/14
OPST-HPCI-4120-02, "HPCI Pump Operability Test (Quarterly)," completed 12/18/13
OPST-HPCI-4120-02, "HPCI Pump Operability Test (Quarterly)," completed 9/18/13
OPST-HPCI-4120-03, "HPCI Pump Comprehensive Test (Biennially)," completed 6/19/13

Section 1R18: Plant Modifications

Procedures

OPOP-48V-2143, "480 and Lower Voltage AC System," Revision 2

Work Orders

WO 370568, "AC-DP-5; Move SBGS Load from CKT 4 to CKT 18 Temporary Modification EC-48330"

WO 00372843, "Install Temporary Modification EC 48805 to Provide Header Supply"

Drawings

B-191301, Sheet 1430, "Control Wiring Diagram – Standby Gas Treatment System 'B' EP Valves," Revision 20

SK-TM-48805-01, "Temporary Fire Water Supply Sketch," Revision 0

Miscellaneous

EC 48330, "Shift Load for Standby Gas System CRP 9-26" from AC-DP-5 CKT 4 to CKT 18, Phase C"

EC 48805, Temporary Fire Pumps to Support Repair of the Fire Protection Header Leak"

A-191353-AC-DP-5, "Power Panel Schedule," Revision 12

SIP-14-03, "FH-9/FH-10 Removed from Service to Install Temporary Fire Pumps per EC 48805," 1/30/14

ECT-48805-01, "Temporary Fire Pump Temporary Modification Installation Test," Revision 0

Section 1R19: Post-Maintenance TestingProcedures

OPST-CS-4123-06B, "Core Spray Pump B Comprehensive Operability Test," Revision 3

OPST-CS-4123-03B, "Core Spray Pump B Quarterly Operability Test," Revision 3

OPOP-RHR-2124, "Residual Heat Removal System," Revision 9

OPST-RHR-4124-13D, "RHR Pump D Operability Test (Quarterly)," Revision 3

OPST-RHR-4124-13B, "RHR Pump B Operability Test (Quarterly)," Revision 3

EN-WM-107, "Post Maintenance Testing," Revision 4

MMVN-10080, "Insert Valve Installation Procedure for Carbon Steel Piping," Revision 1

Condition Reports

CR-VTY-2014-00234

CR-VTY-2014-00524

CR-VTY-2014-00960

CR-VTY-2014-00359

CR-VTY-2014-00945

CR-VTY-2014-01056

CR-VTY-2014-00444

CR-VTY-2014-00951

CR-VTY-2014-01070

Work Orders

WO 00351945, "P-46-1B; Replace Mechanical Seal"

WO 00363101, "V10-48D; Reseal/Replace Valve Seat"

WO 00355459, "P-1-1A Feed Pump, Replace Mechanical Seal (Inboard)"

WO 00348750, "P-1-1A Feed Pump, Replace Mechanical Seal (Outboard)"

WO 00372842, "Leak in Fire HDR near FP-V76-106 and 12" FP-1"

WO 00377335, "AM1200-E-L-2929; Replace Broken Prop in Breaker"

Miscellaneous

SEP-VTY-IST-001, "Vermont Yankee Nuclear Power Station Inservice Testing Program Fifth 10-Year Interval," Revision 1

EC 48846, "Install TEAM Insert Valves to Support Repair of FP Leaking Valves FP-100 and FP-106"

EC 49178, "Temporary Bypass of Circ. Water Intake Structure Low Level Signals"

ECT 48805-02, "Temporary Fire Pump Temp Mod Restoration Guidance," Revision 0, completed 3/24/14

Section 1R22: Surveillance TestingProcedures

OPST-RHR-4124-13A, "RHR Pump A Operability Test (Quarterly)," Revision 3
 OPST-RHR-4124-13C, "RHR Pump C Operability Test (Quarterly)," Revision 3
 OPST-RHR-4124-12A, "RHRSW Pump/Valve A Operability and Full Flow Test," Revision 1
 OPST-RHR-4124-12C, "RHRSW Pump/Valve C Operability and Full Flow Test," Revision 1
 OPSP-SBO-10067-07, "Station Blackout Diesel Generator Local Start Surveillance," Revision 1
 OPST-EDG-4126-03A, "6 Month A EDG Fast Start Operability Test," Revision 5
 OP 4363, "HPCI Suction Transfer on Condensate Storage Tank (CST) Low Level Functional Test and CST Level Instrumentation Calibration," Revision 33
 OPST-HPCI-4120-02, "HPCI Pump Operability Test (Quarterly)," Revision 4

Work Orders

WO 52511470, "DG-1-1A; Install Recorder to Obtain 'A' EDG Time to Rated Volt and Frequency"

Condition Reports

CR-VTY-2013-06405	CR-VTY-2014-00419	CR-VTY-2014-00928
CR-VTY-2013-06607	CR-VTY-2014-00796	CR-VTY-2014-00942
CR-VTY-2014-00392	CR-VTY-2014-00871	CR-VTY-2014-01112

Miscellaneous

SEP-VTY-IST-001, "Vermont Yankee Inservice Testing Program Plan," Revision 1
 VYOPF 4363.04, "HPCI Suction Transfer on Condensate Storage Tank (CST) Low Level Instrumentation Calibration Data Sheets," 5/29/13
 VYOPF 4363.04, "HPCI Suction Transfer on Condensate Storage Tank (CST) Low Level Instrumentation Calibration Data Sheets," 11/26/13
 VYC-723, "Condensate Storage Tank Level (HPCI) Monitoring," Revision 3
 WR 00323745, "CST/Torus Trouble Alarm May Be Coming From This Unit"
 EN-MA-125, Attachment 9.3, "Troubleshooting Control Form," completed 1/30/14

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Emergency Plan, Revision 54

Section 1EP6: Drill EvaluationProcedures

EOP-1, "RPV Control," Revision 4
 EOP-2, "ATWS RPV Control," Revision 8
 EOP-3, "Primary Containment Control," Revision 5
 EOP-4, "Secondary Containment Control and Radioactivity Release Control," Revision 3
 OE 3107, "EOP/SAG Appendices," Revision 29
 OPP-7018, "Emergency Operating Procedure Program," Revision 0
 OPP-7018, Attachment 5, "Vermont Yankee PSTG-EOP Differences," Revision 26
 OPP-7018, Attachment 8, "Vermont Yankee EOP User's Guide," Revision 2
 OPP-7018, Attachment 9, "Vermont Yankee Emergency Operating Procedures Study Guide," Revision 16

Section 4OA1: Performance Indicator VerificationProcedures

EN-LI-114, "Performance Indicator Process," Revision 6

OP 0631, "Radiochemistry," Revision 28

OP 4152, "Equipment and Floor Drain Sump and Totalizer Surveillance," Revision 50

Miscellaneous

NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6

NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7

AP 0094, "Performance Indicator Data Input Sheets," January – June 2013

EN-LI-114, "NRC Performance Indicator Technique/Data Sheet," July – December 2013

EN-LI-114, Attachment 9.2, "NRC Performance Indicator Technique/Data Sheet," 4th Quarter 2013, 3rd Quarter 2013, 2nd Quarter 2013**Section 4OA3: Follow-Up of Events and Notices of Enforcement Discretion**Condition Reports

CR-VTY-2013-06330

Work Orders

WO 369610, "Inspect Conduit Flood Seals for Extent of Condition"

WO 143893, "(SA) Manhole, Handhole Conduit Flood Seals Inspection"

LIST OF ACRONYMS

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
AC	alternating current
DRP	Division of Reactor Projects
EAL	emergency action level
HPCI	high pressure coolant injection
IMC	inspection manual chapter
LER	licensee event report
MG	motor generator
NCV	non-cited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
RHR	residual heat removal
RHRSW	residual heat removal service water
SSC	structure, system, or component
UFSAR	Updated Final Safety Analysis Report
UPS	uninterruptible power supply
VY	Vermont Yankee Nuclear Power Station