



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

July 31, 2013

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 PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTION REPORT
05000271/2013008**

Dear Mr. Wamser:

On June 27, 2013, the United States Nuclear Regulatory Commission (NRC) completed an inspection at your Vermont Yankee Nuclear Power Station. The enclosed report documents the inspection results, which were discussed on June 27, 2013 with you and other members of your staff.

This inspection examined activities conducted under your license as they relate to identification and resolution of problems and compliance with the Commission's rules and regulations and conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the samples selected for review, the inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. Entergy personnel identified problems and entered them into the corrective action program at a low threshold. Entergy personnel prioritized and evaluated issues commensurate with the safety significance of the problems and corrective actions were generally implemented in a timely manner.

This report documents one NRC-identified finding of very low safety significance (Green). The inspectors determined that this finding involved a violation of NRC requirements. However, because of the very low safety significance and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation (NCV), consistent with Section 2.3.2 of the NRC Enforcement Policy. If you contest this NCV, 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.

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

C. Wamser

2

NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Document 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/

Fred L. Bower, Acting Chief
Reactor Projects Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 05000271/2013008
w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Document 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/

Fred L. Bower, Acting Chief
 Reactor Projects Branch 5
 Division of Reactor Projects

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

Enclosure: Inspection Report 05000271/2013008
 w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

Distribution w/encl: (via e-mail)

W. Dean, RA
 D. Lew, DRA
 D. Roberts, DRP
 A. Burritt, DRP
 C. Miller, DRS
 J. Rogge, DRS
 F. Bower, DRP
 S. Shaffer, DRP
 E. Keighley, DRP

J. DeBoer, DRP
 R. Clagg, DRP, SRI Actg
 S. Rich, DRP, RI
 A. Rancourt, DRP, AA
 V. Campbell, RI OEDO
 RidsNrrPMVermontYankee Resource
 RidsNrrDorLI1-1 Resource
 ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH6\Bickett\VY PIR report rev final.docx

ADAMS ACCESSION NUMBER: **ML13212A119**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	BBickett/BB	RPowell/RP	FBower/FLB		
DATE	7/26/13	7/29/13	7/31/13		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No: 50-271

License No: DPR-28

Report No: 05000271/2013008

Licensee: Entergy Nuclear Operations, Inc.

Facility: Vermont Yankee Nuclear Power Station

Location: Vernon, VT

Dates: June 10, 2013 through June 27, 2013

Team Leader: Brice Bickett, Senior Project Engineer

Inspectors: Sarah Rich, Resident Inspector
Aaron Dugandzic, Project Engineer
Briana Bollinger, Reactor Engineer

Approved by: Fred Bower, Acting Chief
Reactor Projects Branch 5
Division of Reactor Projects

SUMMARY

IR 05000271/2013008; 06/10/2013 - 06/27/2013; Vermont Yankee Nuclear Power Station (Vermont Yankee); Biennial Baseline Inspection of Problem Identification and Resolution. The inspectors identified one finding in the area of prioritization and evaluation of issues.

This NRC team inspection was performed by three regional inspectors and one resident inspector. The inspectors identified one finding of very low safety significance (Green) during this inspection and classified this finding as a non-cited violation (NCV). 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," dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within Cross-Cutting Areas," dated October 28, 2011. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated January 28, 2013. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4.

Problem Identification and Resolution

The inspectors concluded that Entergy was generally effective in identifying, evaluating, and resolving problems. Entergy personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. In most cases, Entergy personnel appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Entergy typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner. However, the inspectors identified one violation of NRC requirements in the area of prioritization and evaluation of issues.

The inspectors concluded that, in general, Entergy adequately identified, reviewed, and applied relevant industry operating experience to Vermont Yankee operations. In addition, based on those items selected for review, the inspectors determined that Entergy's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a NCV of Title 10 *Code of Federal Regulations* (10 CFR) 50.65(b)(2) because Entergy did not properly scope the reactor building heating, ventilation and air conditioning (HVAC) system within the station's maintenance rule program. Specifically, the inspectors determined Entergy did not properly scope the reactor building HVAC system, specific to the system's function to run and assist in area temperature control, into the maintenance rule program as required. The system is directly used in the emergency operating procedure (EOP)-4, "Secondary Containment Control," to assist in mitigating a high temperature condition.

The inspectors determined that this finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, reliably starting reactor building HVAC system could mitigate or lessen the severity of a high temperature condition in the reactor building during an event or system which requires EOP-4 entry. The performance deficiency was also determined to be similar to more than minor example 7.d per IMC 0612, Appendix E, "Examples of Minor Issues." The inspectors completed a Phase 1 screening of the finding per IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined the finding to be of very low safety significance (Green) because the performance deficiency was not a design or qualification deficiency, did not involve an actual loss of safety function, did not represent actual loss of a safety function of a single train for greater than its technical specification allowed outage time, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The inspectors did not identify a cross-cutting aspect associated with the finding because the underlying performance aspects occurred in the late 1990s and no recent operating experience was identified that would reasonably have prompted Entergy to review their scoping adequacy. (Section 4OA2.1.c)

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed the procedures that described Entergy's corrective action program at Vermont Yankee. To assess the effectiveness of the corrective action program, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and Entergy procedure EN-LI-102, "Corrective Action Process." For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed condition reports selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process. Additionally, the inspectors attended multiple operational focus and condition review group (CRG) meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs.

(1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed corrective and preventative maintenance work orders, completed surveillance test procedures, operator logs, and periodic trend reports. The inspectors also completed field walkdowns of various systems on site, such as the high pressure coolant injection system and security defensive posts. Additionally, the inspectors reviewed a sample of condition reports written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Entergy personnel entered conditions adverse to quality into their corrective action program as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of condition reports issued since the last NRC biennial Problem Identification and Resolution inspection completed in April 2011. The inspectors also reviewed condition reports that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were properly classified. 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 developed appropriate corrective actions to address the identified causes. 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 the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Entergy's completed corrective actions through documentation review, and in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed condition reports for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Entergy's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of condition reports associated with selected NCVs and findings to verify that Entergy personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Entergy actions related to service water pump oil issues and cable submergence challenges at the station.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that Entergy staff identified problems and entered them into the corrective action program at a low threshold. Entergy staff at Vermont Yankee initiated approximately 12,000 condition reports between April 2011 and May 2013. The inspectors observed supervisors at the daily operations focus meeting and CRG meetings, appropriately questioning and challenging condition reports to ensure clarification of the issues. Based on the samples reviewed, the inspectors determined that Entergy trended equipment and programmatic issues, and appropriately identified problems in condition reports. The inspectors verified that conditions adverse to quality identified through this review were entered into the corrective action program as appropriate. Additionally, inspectors concluded that personnel were identifying trends at low levels. In general, inspectors did not identify any issues or concerns that had not been appropriately entered into the corrective action program for evaluation and resolution.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Entergy appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. Entergy screened condition reports for operability and reportability, categorized the condition reports by significance, and assigned actions to the appropriate department for evaluation and resolution. The condition report screening process considered human performance issues, radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety conscious work environment.

Based on the sample of condition reports reviewed, the inspectors noted that the guidance provided by Entergy corrective action program implementing procedures

appeared sufficient to ensure consistency in categorization of issues. Operability and reportability determinations were generally performed when conditions warranted and in most cases, the evaluations supported the conclusion. Causal analyses appropriately considered the extent of condition or problem, generic issues, and previous occurrences of the issue. However, the inspectors identified one example of more than minor significance where Entergy personnel were not effective in evaluating maintenance rule applicability for the reactor building HVAC system. This finding is documented in Section 4OA2.1.c.

Additionally, two performance issues of minor significance were identified in which causal evaluations, contrary to EN-LI-119, "Apparent Cause Evaluation Process," were not adequate or consistent to ensure the evaluations were supported by sufficient details and facts to adequately support and conclude the causes were well understood and corrective actions were adequate. Specifically:

- Condition Report (CR)-2011-4672 (Clean Area Contamination issue): The inspectors determined that documentation and details associated with the adverse condition were not sufficient from a stand-alone quality perspective to determine whether the apparent cause appropriately identified potential causes and that corrective actions were adequate to address those causes. Ultimately, the inspectors were able to determine that necessary corrective action was taken at that time, addressed likely causes and appeared to be effective in the subsequent refueling outage. Entergy issued CR-2013-3925 to address the corrective action performance aspects.
- CR-2012-4507 ('D' service water pump low oil level): The inspectors determined that corrective action program expectations as delineated in EN-LI-102, "Corrective Action Program," and EN-LI-119, "Apparent Cause Evaluation Process," with respect to depth of analysis and corrective action plan completeness were not met. The inspectors determined that the associated lower-tier apparent cause did not identify contributing and/or likely underlying causes. Specifically, Entergy staff did not fully investigate the repeat adverse condition to identify likely causes. Additionally, the inspectors determined that corrective actions did not fully address the cause or monitor the actions taken to ensure the condition was corrected. However, the inspectors were able to determine there were sufficient corrective actions, subsequent to closure of this condition report, implemented to ensure a degraded condition does not currently exist. The inspectors also acknowledge the station's corrective action and assessment group later identified that corrective actions for the identified issue in CR-2012-4507 had not been effectively addressed. Entergy issued CR-2013-04192 to address the corrective action performance aspects.

The inspectors independently evaluated the deficiencies noted above for significance in accordance with the guidance in IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues." As described above, the inspectors determined these condition reports were deficiencies of minor significance and, therefore, are not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, Entergy identified actions to prevent recurrence. The inspectors concluded that corrective actions to address the sample of NRC NCVs and findings since the last problem identification and resolution inspection were timely and effective. The inspectors did observe some minor weaknesses in Entergy's resolution of degraded conditions and/or implementation of effective corrective actions. One example of this weakness was regarding Entergy's corrective actions associated with CR-2013-02014. Entergy did not take adequate corrective actions in accordance with EN-LI-102, "Corrective Action Program," regarding an adverse condition associated with vendor workmanship issue on a feedwater valve. However, the inspectors were made aware of the fleet initiative to address this CR as part of a roll-up of similar issues in this regard. The inspectors determined this corrective action would appear to capture the specific performance aspects of CR-2013-02014.

c. Finding

Introduction: The inspectors identified a Green NCV of 10 CFR 50.65(b)(2) because Entergy did not properly scope the reactor building HVAC system within the Vermont Yankee maintenance rule program. The system is directly used in EOP-4, "Secondary Containment Control," to assist in mitigating a high temperature condition.

Description: The inspectors identified that Entergy did not correctly scope the reactor building HVAC system into the Vermont Yankee maintenance rule program. 10 CFR 50.65 (b)(2)(i) requires that systems, structures and components (SSCs) used in plant EOPs be in scope of the maintenance rule program. Consistent with 10 CFR 50.65 and Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," the industry guidance document NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," Rev. 4A, specifies that non safety-related SSCs that are explicitly used in the EOPs to provide a mitigating function be in the Maintenance Rule scope. The same document defines mitigating as actions or steps taken to lessen the severity or the adverse consequences of the event/symptom that necessitated entry into the EOPs. The plant's EOP-4, "Secondary Containment Control," Rev. 3, includes in the temperature leg a step that "IF reactor building vent exhaust is below 14 m/hr THEN operate available reactor building HVAC." A similar step is also included in the override section of the procedure. The entry criterion for EOP-4 related to temperature is an area temperature above the Maximum Normal Operating Temperature for that area. The inspectors determined that running reactor building HVAC would lessen the severity of a high temperature condition in the reactor building. Therefore, the system, specific to the start/run function, meets the criteria to be scoped into the Maintenance Rule. Entergy entered this into their corrective action program as CR-VTY-2013-4235.

The inspectors further determined that the reactor building HVAC system has not reliably started eleven times since December 2011. Review of the associated work orders showed that corrective maintenance had been performed on several occasions in response to the failures, and yet reliability of the system to start remains a challenge,

with the most recent issue occurring on May 4, 2013. The failures have had only minor impact on plant operations.

Analysis: The inspectors determined this finding was a performance deficiency because Entergy did not scope the reactor building HVAC system into the maintenance rule program. The inspectors determined that this finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences, in that the reactor building HVAC system does not start reliably, which could prevent it from being used to mitigate or lessen the severity of a high temperature condition in the reactor building. The performance deficiency was verified to be more than minor per IMC 0612, Appendix E, "Examples of Minor Issues," example 7.d.

The inspectors completed a Phase 1 screening of the finding per IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and determined the finding to be of very low safety significance (Green) because the performance deficiency was not a design or qualification deficiency, did not involve an actual loss of safety function, did not represent actual loss of a safety function of a single train for greater than its technical specification allowed outage time, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event.

The performance deficiency has no cross-cutting aspect associated with it because the improper scoping took place in 1997 and no recent events would reasonably have prompted Entergy to review their original scoping decision basis.

Enforcement: 10 CFR 50.65 (b)(2)(i), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," requires that the scope of the monitoring program specified in paragraph (a)(1) include non-safety related SSCs that are used in plant EOPs. The reactor building HVAC system is used in the temperature leg of EOP-4, "Secondary Containment Control," to assist in temperature control. Contrary to the above, as of June 27, 2013, Entergy did not include the start/run function of reactor building HVAC system in the scope of the monitoring program specified in paragraph (a)(1). Because this violation was of very low safety significance (Green) and Entergy has entered this issue into their corrective action program as CR-VTY-2013-4235, this violation is being treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy. **(NCV 05000271/2013008-001, Improper Maintenance Rule Scoping of the Reactor Building HVAC System)**

.2 Assessment of the Use of Operating Experience

a. Inspection Scope

The inspectors reviewed a sample of condition reports associated with review of industry operating experience to determine whether Entergy appropriately evaluated the operating experience information for applicability to Vermont Yankee and had taken appropriate actions, when warranted. The inspectors also reviewed evaluations of operating experience documents associated with a sample of NRC generic communications to ensure that Entergy adequately considered the underlying problems associated with the issues for resolution via their corrective action program. In addition, the inspectors observed various plant activities to determine if the station considered

industry operating experience during the performance of routine and infrequently performed activities.

b. Assessment

The inspectors determined that Entergy staff appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that operating experience was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable. The inspectors also observed that industry operating experience was routinely discussed and considered during the conduct of operational focus meetings.

c. Findings

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

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

b. Assessment

The inspectors concluded that self-assessments, audits, and other internal Entergy assessments were generally critical, thorough, and effective in identifying issues. The inspectors observed that Entergy personnel knowledgeable in the subject completed these audits and self-assessments in a methodical manner. Entergy personnel completed these audits and self-assessments to a sufficient depth to identify issues which were then entered into the corrective action program for evaluation. In general, the station implemented corrective actions associated with the identified issues commensurate with their safety significance.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment at Vermont Yankee. Specifically, the inspectors interviewed

personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station Employee Concerns Program coordinator to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the Employee Concerns Program files to ensure that Entergy entered issues into the corrective action program when appropriate.

b. Assessment

During interviews, Vermont Yankee staff expressed a willingness to use the corrective action program to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the corrective action program and the Employee Concerns Program. Based on these limited interviews, the inspectors concluded that there was no evidence of an unacceptable safety conscious work environment and no significant challenges to the free flow of information.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On June 27, 2013, the inspectors presented the inspection results to Mr. Wamser, Site Vice President and other members of the Vermont Yankee 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

Licensee Personnel

Chris Wamser, Site Vice President
Vincent Fallacara, General Manager Plant Operations
Jon Bengtson, CA&A Manager
Bob Wanczyk, Licensing Manager
Jim Rogers, Design Engineering Manager
Jeff Merkle, System Engineering Manager
Steve Naeck, Production Manager
Pat Ryan, Security Manager
Derek Jones, Operations Manager
Ed Harms, Assistant Operations Manager
Ken O'Neil, Work Week Manager
Bill Penniman, CA&A Specialist
Ellen Cota, OE Coordinator
Paul Stover, RP Supervisor
Scott Dorval, RP Supervisor
Rob Power, P&C Engineer
Ronald Sherman, P&C Engineer
Mark Anderson, P&C Engineer
Jeff Clough, Systems Engineer
Donna Drolette, Systems Engineer
Gene Gibbs, Systems Engineer
Isaac Grossweiler, Systems Engineer
John Stasolla, Systems Engineer
Tom Silko, Maintenance Coordinator
Ben Egnew, Licensing Specialist

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened and Closed

05000271/2013008-001	NCV	Improper Maintenance Rule Scoping of the Reactor Building HVAC System
----------------------	-----	---

LIST OF DOCUMENTS REVIEWED

Section 40A2: Problem Identification and Resolution

Audits and Self-Assessments

10 CFR 50.65 (a)(3) Maintenance Rule Periodic Assessment (Cycle 28), December 2012
Combined Chemistry, Effluents and Environments Audit QA-2-6-2011-VY-1
Combined Radiation Protection and Radwaste Audit QA-14/15-2011-VY-1

Maintenance / Work Management Audit, QA-10-2012-VY-1
 Corrective Action Program Audit, QA-03-2011-VY-1
 FSA-CA&A-2012-00029-CAP Health and Process Adherence
 FSA-Emergency Planning-LO-2011-00114-NRC Inspection Readiness
 FSA-Security-LO-2011-0036-2011-NEI 08-07
 FSA-Design Engineering-LO-2011-00078-Equipment Qualification Program

LO-HQNLO-2012-00003 LO-VTYLO-2012-00045 LO-VTYLO-2012-00003
 LO-VTYLO-2012-00119 LO-VTYLO-2012-00115 LO-WTVTY-2011-00227

Condition Reports (* indicates that condition report was generated as a result of this inspection)

2008-03926	2011-02785	2011-05536	2012-02413	2012-04697
2008-03943	2011-02945	2011-05599	2012-02415	2012-04699
2009-01065	2011-03002	2011-05646	2012-02418	2012-04726
2009-01427	2011-03012	2011-05659	2012-02470	2012-04783
2009-04282	2011-03099	2011-05661	2012-02506	2012-04930
2010-00328	2011-03109	2012-00142	2012-02674	2012-05065
2010-00522	2011-03134	2012-00200	2012-02691	2012-05176
2010-03050	2011-03198	2012-00201	2012-02756	2012-05272
2010-03059	2011-03222	2012-00252	2012-02811	2012-05342
2010-05309	2011-03286	2012-00379	2012-02817	2012-05345
2011-00113	2011-03320	2012-00437	2012-02857	2012-05493
2011-00667	2011-03449	2012-00483	2012-02863	2012-05503
2011-00714	2011-03694	2012-00484	2012-02867	2012-05551
2011-00852	2011-03837	2012-00499	2012-02889	2012-05620
2011-00870	2011-03900	2012-00503	2012-03017	2012-05716
2011-00900	2011-03902	2012-00545	2012-03139	2012-05764
2011-01037	2011-04114	2012-00546	2012-03241	2012-05876
2011-01038	2011-04203	2012-00548	2012-03489	2012-05898
2011-01041	2011-04291	2012-00650	2012-03530	2012-05995
2011-01400	2011-04362	2012-00907	2012-03554	2012-06018
2011-01403	2011-04467	2012-00918	2012-03561	2012-06079
2011-01478	2011-04480	2012-01126	2012-03585	2012-06213
2011-01487	2011-04505	2012-01169	2012-03636	2012-06240
2011-01511	2011-04512	2012-01172	2012-03664	2012-06274
2011-01530	2011-04526	2012-01250	2012-03683	2012-06316
2011-01848	2011-04597	2012-01484	2012-03884	2012-06318
2011-01898	2011-04672	2012-01629	2012-03885	2013-00099
2011-01899	2011-04709	2012-01638	2012-03899	2013-00116
2011-01981	2011-04755	2012-01775	2012-03902	2013-00161
2011-01997	2011-04763	2012-01818	2012-03915	2013-00164
2011-02129	2011-04787	2012-01901	2012-04125	2013-00170
2011-02162	2011-04971	2012-01970	2012-04190	2013-00184
2011-02266	2011-04994	2012-01995	2012-04198	2013-00188
2011-02270	2011-05094	2012-02107	2012-04250	2013-00451
2011-02404	2011-05111	2012-02135	2012-04342	2013-00452
2011-02483	2011-05294	2012-02180	2012-04484	2013-00458
2011-02489	2011-05295	2012-02269	2012-04507	2013-00460
2011-02490	2011-05349	2012-02274	2012-04552	2013-00499
2011-02652	2011-05425	2012-02275	2012-04634	2013-00499
2011-02685	2011-05429	2012-02277	2012-04674	2013-00570

2013-00712	2013-01639	2013-02143	2013-02564	2013-03305
2013-00833	2013-01643	2013-02177	2013-02602	2013-03315
2013-00888	2013-01678	2013-02178	2013-02607	2013-03356
2013-00986	2013-01735	2013-02228	2013-02680	2013-03896*
2013-01001	2013-01774	2013-02264	2013-02755	2013-03925*
2013-01142	2013-01777	2013-02294	2013-02780	2013-03930*
2013-01148	2013-01779	2013-02310	2013-02781	2013-04154*
2013-01288	2013-01793	2013-02329	2013-02807	2013-04173*
2013-01294	2013-01864	2013-02370	2013-02810	2013-04192*
2013-01517	2013-01898	2013-02413	2013-02842	2013-04235*
2013-01520	2013-01917	2013-02444	2013-02984	2013-04729*
2013-01578	2013-01931	2013-02479	2013-02985	
2013-01585	2013-01977	2013-02485	2013-03183	
2013-01639	2013-02014	2013-02533	2013-03222	

Operating Experience

NRC IN 2012-14, Motor-Operated Valve Inoperable Due to Stem-Disc Separation

NRC IN 2013-05, Battery Expected Life and its Potential Impact on Surveillance Requirements

NRC IN 90-41, Potential Failure of General Electric Magna-Blast Circuit Breakers and AK Circuit Breakers

NRC IN 2002-12, Submerged Safety-Related Electrical Cables

NRC GL 2007-01, Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients

OE 33189-20110416

OE 32737-20110628

OE 33784-20110716

OE 34107-20110827

ESI 21-10CFR21-0102

Non-Cited Violations and Findings

NCV-2011-005-02, Loss of Shutdown Cooling due to tagging error

NCV-2011-005-03, Incomplete inventory for spent resin shipment

NCV-2011-004-01, Security Issue

NCV-2012-003-01, Inadequate risk assessment for isolating the condensate pumps' minimum flow line's automatic flow control valve

FIN-2012-004-01, Recirc MG trip due to cable failure – Maintenance did not adequately characterize the PM/Material replacement status from prior inspections and as a result, no Engineering follow-up was done

NCV-2012-002-02, Failure of the 'D' Service Water Pump due to low oil and inadequate corrective actions

NCV-2012004-02, During a surveillance test, dedicated operators required to maintain operability of primary containment left the immediate vicinity of open manual containment isolation valves

NCV 2013-002-02, Failure to Implement Compensatory Measures Associated with a Temporary Modification

NCV 2013-002-03, Inadequate Corrective Action for Maintaining Operability of the Low Pressure Coolant Injection Battery UPS-1A

NCV 2013-002-04, Failure of the "B" Emergency Diesel Generator from Jacket Water Leakage Due to Inadequate Corrective Action

Procedures

AP-0152, Shift Turnover, Rev. 50

AP-0152, Shift Turnover, Revision 51

EMMP-BRKR-5221-22, GE Type AK50 & 75 Circuit Breaker Inspection, Calibration, and Testing, Rev. 00
 EMOP-GRND-52100, Electrical Maintenance Procedure, Rev. 1
 EN-DC-167, Classification of Structures, Systems and Components, Rev. 5
 EN-DC-204, Maintenance Rule Scope and Basis, Rev. 2
 EN-DC-205, Maintenance Rule Monitoring, Rev. 4
 EN-DC-206, Maintenance Rule(a)(1) Process, Rev. 2
 EN-DC-207, Maintenance Rule Periodic Assessment, Rev. 2
 EN-DC-324, Preventive Maintenance Program, Rev. 8
 EN-DC-345, Equipment Reliability Clock, Rev. 1
 EN-DC-346, Cable Reliability Program, Rev. 5
 EN-EC-100, Employee Concerns Program, Rev. 6
 EN-EP-305, Emergency Planning 10CFR50.54(q) Review Program, Rev. 3
 EN-FAP-OU-001, Outage Planning and Execution Best Practices, Rev. 1
 EN-HU-101, Human Performance Program, Revision 11
 EN-HU-103, Human Performance Error Reviews, Rev. 6
 EN-HU-103, Human Performance Error Reviews, Revision 7
 EN-LI-102, Corrective Action Process, Rev. 20
 EN-LI-118, Root Cause Evaluation Process (RCE), Rev. 18
 EN-LI-119, Apparent Cause Evaluation (ACE), Rev. 16
 EN-LI-121, Trend Analysis, Rev. 0
 EN-LI-123, Safety Culture Reviews, Rev. 1
 EN-MA-118, Foreign Material Exclusion, Rev. 7
 EN-OE-100, Operating Experience Program, Revision 18
 EN-OP-102, Protective and Caution Tagging, Rev. 15
 EN-QV-136, Nuclear Safety Culture Monitoring, Rev. 1
 EN-RP-104, Personnel Contamination Events, Revision 6
 EN-RP-104, Personnel Contamination Events, Revision 6
 EN-RP-105, Radiological Work Permit, Revision 9
 EN-WM-100, Work Request (WR) Generation, Screening and Classification, Rev. 8
 EN-WM-105, Work Order Planning, Rev.11
 EN-WM-109, Scheduling, Rev. 7
 MMMP-INSP- 00216-21, Maintenance Department Routine Inspection, Rev. 8
 OP 2115, Primary Containment, Rev. 83
 OP 3540, Control Room Actions During an Emergency, Rev. 30
 OPOP-SW-2181, Service Water/Alternate Cooling Operating Procedure, Rev. 8
 OPOP-SW-2181, Service Water/Alternate Cooling System, Rev. 0
 OPST-HPCI-4120, High Pressure Coolant Injection System Surveillance, Rev. 1

Work Orders

00237473	00276632	00285015	00302838	00342490
00252028	00276633	00290233	00304278	00345070
00260656	00277741	00294605	00339486	00347609
00273697	00279592	00301980	00340109	

Work Requests

307572	258008	227202	266130
--------	--------	--------	--------

Miscellaneous

2011 - 2013 Quarterly Chemistry Trend Reports
 2011 - 2013 Quarterly Radiation Protection Trend Reports

CC-Corrective Maintenance Backlog Detail, 6/10/13
 Corrective Action Program Performance Indicator Reports 2011 – 2013 (Various)
 DC-Deficient Maintenance Backlog Detail, 6/10/13
 Disabled Annunciator Control Sheets
 EC 29548, Add RHR Hx Low DP Alarm Interlock, Rev. 0
 IEEE Std. 450-2010, IEEE Recommended Practice for Maintenance, Testing and Replacement
 of Vented Lead-Acid Batteries for Stationary Applications, dated 25 Feb. 2011
 Maintenance Back Log Report, 6/10/13
 On-Line Corrective Maintenance Backlog, Monthly Reports from April 2011 – June 2013
 On-Line Deficient Maintenance Backlog, Monthly Reports from April 2011 – June 2013
 OPPP-07018, Att. 9, Vermont Yankee Emergency Operating Procedures Study Guide, Rev 16\
 OTHER Maintenance Backlog Detail, 6/10/13
 Quality Assurance Program Manual, Rev. 24
 RWP 2011-0612, Revision 00, RFO-29 Scram Discharge Header
 RWP 2011-0612, RWP Pre-Job Brief/ALARA Requirements
 Security Excellence Action Plan, Rev. 13
 SEP-CBL-VTY-001, Cable Reliability Program Plan, March 2012
 System Health Reports (various)
 Top Ten Equipment Reliability List (May 2013)
 Top Ten Equipment Reliability Action Plan – Engineered Solutions for Cable Submergence in
 Manholes, June 2013
 VY – Maintenance Rule – Monthly Summary Report, 4/30/2013
 VY – May 2013 Equipment Reliability Report
 VY CRG Meeting Package, 6/12/13
 VY OPS Focus Meeting Agenda (various)
 VYSE-MRL-2011-001, Performance Evaluation Performance Improvement / Action Plan for
 HPCI-System, Rev. Original
 VYSE-MRL-2012-006, Performance Evaluation Performance Improvement / Action Plan for
 RCIC-System, Rev. Original
 LEL-VTY-2012-0006440 LEL-VTY-2012-0006442 LEL-VTY-2012-0010931
 LEL-VTY-2012-0011248 LEL-VTY-2012-0011253 LEL-VTY-2012-0011261
 LEL-VTY-2012-0011263 LEL-VTY-2012-0011899 LEL-VTY-2012-0013375
 LEL-VTY-2012-0019005 LEL-VTY-2012-0028854

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
CFR	Code of Federal Regulations
CR	Condition report
CRG	Condition review group
EOP	Emergency operating procedure
HVAC	Heating, ventilation, and air conditioning
IMC	Inspection Manual Chapter
NCV	Non-cited violation
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records System
SDP	Significance Determination Process
SSC	Structures, systems and components