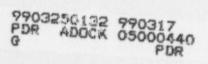
# U. S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket No: License No:	50-440 NPF-58
Report No.:	50-440/99001(DRP)
Licensee:	FirstEnergy Nuclear Operating Company P.O. Box 97 A200 Perry, OH 44081
Facility:	Perry Nuclear Power Plant
Location:	Perry, OH
Dates:	January 13 through February 24, 1999
Inspectors:	C. Lipa, Senior Resident Inspector J. Clark, Resident Inspector
Approved by:	Thomas J. Kozak, Chief Reactor Projects Branch 4 Division of Reactor Projects



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# EXECUTIVE SUMMARY

## Perry Nuclear Power Plant NRC Inspection Report 50-440/99001(DRP)

This inspection report included resident inspectors' evaluation of aspects of licensee operations, engineering, maintenance, and plant support.

## Operations

- The licensee continued to safely and effectively operate the plant during pin-hole fuel leak suppression and reactor power coastdown activities throughout the inspection period. Operators were fully aware of plant parameter changes as the plant coasted down (Section O1.1).
- The inspectors concluded that the licensee effectively replaced two circuit cards in the redundant reactivity control system, which was categorized as a medium risk maintenance activity, through the use of good briefings, effective command and control, and clear communications between operations and maintenance personnel (Section 01.2).
- Inattention to detail by a licensed operator led to using the wrong section of an Operating Instruction for a system restoration activity. The operator identified his error and appropriately notified operations management of the occurrence. Plant management provided training to operations personnel emphasizing the importance of self-checking and attention to detail during work activities (Section O1.3).

#### Maintenance

- The inspectors identified that a surveillance test to monitor the condition of the Unit 2, Division 3 battery was not conducted in accordance with the procedure. This failure to follow an approved procedure was considered a Non-Cited Violation of NRC requirements (Section M1.2).
- Plant personnel failed to adhere in all cases to plant procedures governing the storage of items near safety-related equipment. One Non-Cited Violation was identified concerning this issue (Section M1.3).

## Engineering

- The Unit 2, Division 3 battery was declared inoperable after the licensee identified that its age was greater than its rated lifetime and that increased frequency testing was required by Technical Specifications. The battery was subsequently successfully tested.
- The licensee identified that 9 of 60 cells in the Unit 1, Division 3 battery were beyond the rated service life of 20 years. However, the battery was determined to be operable based on the average age of all of the individua! battery cells. An unresolved item concerning the technical justification for calculating the battery age based on the average age of the individual cells was identified (Section E1.1).
- The inspectors concluded that there was generally an appropriate amount of management involvement in the corrective action program (Section E7.1).

# **Report Details**

# Summary of Plant Status

The plant was being operated at 95 percent power at the beginning of the inspection period due to a power reduction for rod testing. The reactor was in coastdown throughout most of the inspection period. Six control rods remained fully inserted for continued fuel leak suppression. Periodic control rod surveillance testing activities were conducted by reducing power by 10 percent. The plant was briefly returned to full power on February 7 and February 20, following the removal of high pressure feedwater heaters from service. High pressure feedwater heaters will remain out-of-service until the March 1999 outage. The plant continued coastdown to approximately 98 percent power by the end of the inspection period.

# I. Operations

# O1 Conduct of Operations

- O1.1 Operation During Suppression of Pin-Hole Fuel Leaks and Power Coastdown
- a. Inspection Scope (71707)

The inspectors followed the guidance of Inspection Procedure (IP) 71707 in assessing the licensee's performance in continued plant operation during pin-hole fuel leak suppression and power coastdown before refueling.

## b. Observations and Findings

The inspectors observed plant operations with continued pin-hole fuel leak suppression and power coastdown activities throughout the inspection period. Six control rods remained fully inserted to maintain the suppression of the three fuel leaks. Chemistry department personnel continued increased (daily) sampling of the off-gas pre-treatment and reactor coolant systems to monitor the effectiveness of fuel leak suppression. Due to fuel burnup, the core reached a state that 100 percent power was no longer achievable with maximum core flow and normal feedwater system alignment. Operations personnel removed the high pressure feedwater heaters 6A and 6B to achieve a higher core thermal output. With the changing conditions, the inspectors noted that items, such as condensate flow, had changed appreciably. Operations personnel conducted thorough crew briefings and reliefs to update other personnel as plant conditions changed. Operations personnel took appropriate steps to appropriately conduct evolutions and testing with new plant characteristics, values, and parameters and reactor engineering personnel provided effective support for power changes and testing activities.

c. <u>Conclusions</u>

The licensee continued to safely and effectively operate the plant during pin-hole fuel leak suppression and reactor power coastdown activities throughout the inspection period. Operators were fully aware of plant parameter changes as the plant coasted down.

# 01.2 Operations During Redundant Reactivity Control System Troubleshooting

# a. Inspection Scope (71707)

The inspectors followed the guidance of IP 71707 in assessing the licensee's performance in ccordinating and controlling activities that effect reactor safety.

## b. Observations and Findings

On January 29, 1999, the inspectors observed activities associated with a work order (WO 99-1172) that was initiated to replace two circuit cards in the redundant reactivity control system (RACS) in response to a locked-in RRCS alarm. The inspectors were informed that work similar to this had produced a reactor trip several years ago. Operations and instrument and controls personnel explained to the inspectors that potential misalignments in the cards, as they were removed or replaced, could produce either a half or full alternate rod insertion signal. Therefore, the licensee considered this work to be of medium risk to plant operations.

The inspectors observed the pre-evolution briefing between operations and maintenance personnel. All personnel appeared to understand the risk associated with the evolution and freely discussed specific activities and the proper control of the evolution. Previous plant and industry problems with such evolutions were also openly discussed at the briefing. Operations personnel clearly stated the termination criteria of the evolution and how they would handle spurious trip signals or responses other than those expected.

The inspectors observed the RRCS card replacements. Operations personnel maintained positive control throughout the evolution and conducted effective three-legged communications between themselves and the maintenance personnel. The operations superintendent provided direct oversight during the evolution. The RRCS cards were successfully replaced with no abnormal plant signals or responses and the system was subsequently returned to service.

### c. <u>Conclusions</u>

The inspectors concluded that the licensee effectively replaced two circuit cards in the RRCS, which was categorized as a medium risk maintenance activity, through the use of good briefings, effective command and control, and clear communications between operations and maintenance personnel.

#### O1.3 Operator Error During System Restoration

#### a. Inspection Scope (71707, 92901)

The inspectors followed the guidance of IPs 71707 and 92901 while reviewing a licensee-identified operator error on February 8, 1999.

#### b. Observations and Findings

While manipulating a valve, an operator identified that he was performing steps in the wrong section of system operating instruction SOI-M17, "Containment Vacuum Relief

System." The operator performed Section 4.1 of SOI-M17 early in his shift to place a valve in its startup configuration. Later in his shift, when it was time to place the valve in its shutdown to standby readiness condition, the operator commenced the steps of SOI-M17; however, the operator repeated the steps in Section 4.1 of the procedure rather than performing the steps of Section 6.1. The operator recognized his error, stopped his work, and notified his supervision of the error. Steps 1 through 5 of Sections 4.1 and 6.1 in SOI-M17 were identical. Therefore, no incorrect positioning or operation of equipment had been conducted during this error. Operations supervision informed the inspectors that the individual was counseled and that training was provided on the event through memorandums and crew briefings.

#### d. Conclusions

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Inattention to detail by a licensed operator led to using the wrong section of an Operating Instruction for a system restoration activity. The operator identified his error and appropriately notified operations management of the occurrence. Plant management provided training to operations personnel emphasizing the importance of self-checking and attention to detail during work activities.

## O2 Operational Status of Facilities and Equipment

## O2.1 General Plant Tours and System Walkdowns (71707)

The inspectors followed the guidance of IP 71707 in walking down accessible portions of several systems and areas, including:

- Reactor Core Isolation Cooling System (RCIC)
- Residual Heat Removal System (RHR)
- High Pressure Core Spray System (HPCS)
- Emergency Service Water System (ESW)
- Safety-related Switchgear and Battery Rooms
- Annulus Exhaust Gas Treatment System (AEGTS)

The inspectors identified several housekeeping issues and exampler the storage of items in the vicinity of safety-related equipment as discussed in Sec. 3. Also, the inspectors identified material condition issues with the Division 3 backers which are discussed in detail in Sections M1.2 and E1.1 of this report. Other minor discrepancies were brought to the licensee's attention and were corrected.

## O6 Operations Organization and Administration

## O6.1 Review of INPO Evaluation Report (71707)

Using the guidance of IP 71707, the inspectors reviewed the Institute of Nuclear Power Operations (INPO) Report, dated August 27, 1998. This report documented the findings from the July 1998 INPO Evaluation at the Perry plant. The licensee informed the inspectors that CRs were initiated for items requiring additional action.

# II. Maintenance

# M1 Conduct of Maintenance

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# M1.1 Review of Routine Maintenance and Surveillance Testing (62707, 61726)

The inspectors observed or reviewed all or portions of the following work activities:

- PTI-E51-P0003, RCIC Terry turbine overspeed trip test
- SVI-D23-T1213, Suppression pool average temperature
- Work Order (WO) 98-2666, RCIC turbine lube oil system flush
- WO 98-10173, RCIC pump suppression pool suction valve lubrication and inspection
- SVI-E31-T5396A, RHR/RCIC Steam line flow high channel calibration
- SVI-R42-T5232, Unit 1 Division 3 battery charger load test
- WO 98-12840, Repair failed battery charger
- WO 99-01172, Replace failed RRCS isolation module
- WO 96-5471, Clean ESW alternate intake tunnel
- SVI-R42-T5224, 125V Battery terminal corrosion and electrolyte temperature check, Unit 2 Division 3
- WO 98-10973, HPCS room cooler replacement
- WO 96-4070, AEGTS Charcoal replacement
- SVI-M15-T1240A, AEGTS Charcoal Filter Adsorber Leakage Test
- SVI-C11-T1003A, Control rod drive exercise

In general, the activities observed were performed satisfactorily. There were appropriate controls and good coordination for the activities. Procedure adherence was acceptable except for the Division 3 battery test as described in Section M1.2.

# M1.2 Material Condition and Surveillance Testing of Division 3 Batteries

a. Inspection Scope (61726, 62707)

The inspectors followed the guidance of IP 61726 and 62707 in assessing the licensee's performance of surveillance testing and maintenance of material condition of safety-related station batteries.

#### b. Observations and Findings

On February 1, 1999, the inspectors toured the Division 3 section of the Unit 2 switchgear room. The inspectors identified apparent plate growth, discoloration, and sediment in certain battery cells and what appeared to be corrosion on several of the cell posts for the Unit 2, Division 3 battery. The inspectors discussed the observations with the battery system engineer who subsequently conducted a walkdown of the battery with the inspectors. The inspectors were concerned that these were indications of advanced cell aging. The system engineer stated that these conditions were minor and did not affect the operability of the battery; however, the system engineer initiated a work request to clean the corrosion from the battery posts.

On February 3, 1999, the inspectors requested a copy of the latest performance of surveillance instruction SVI-R42-T5224, "125V Battery Category B Limits, Terminal Corrosion and Electrolyte Temperature Check (Unit 2, Division III)," Revision 1 (November 1991). The inspectors were informed that SVI-R42-T5224 had been performed on January 29, 1999, along with the Unit 1, Division 3 battery SVI. The inspectors were also informed that readings from the two SVI's were apparently swapped. Condition Report 99-0235 was written to address this error, and the SVI's were reperformed on February 2, 1999.

The inspectors reviewed the February 2 performance of SVI-R42-T5224. During the review, the inspectors noted 7 individual steps that had not been performed in accordance with the procedure. Examples of these items included failure to mark steps as not applicable, failure to read meters within required accuracy, and inappropriately marking the electrolyte level in all cells as zero when some were above or below that mark. The inspectors also noted several other steps that had ambiguous statements or classification of the acceptance criteria. An example of such a statement was under the comments for the appearance of post corrosion. The craft personnel documented a comment that, "cells have dark coloring that is inconsistent with a clean post." However, the acceptance criteria box for no visible corrosion was checked as satisfactory. The inspectors determined that the incorrect performance of the steps, and the ambiguous notes, made it difficult to understand whether or not the SVI was performed satisfactorily. The inspectors were also concerned that subsequent licensee reviewers of the SVI had not noted these problems. The inspectors shared their observations with the system engineer and maintenance supervision. The licensee agreed that these steps did not follow the procedure and ordered the reperformance of the SVI. The SVI was performed satisfactorily on February 4, 1999.

Technical Specification 5.4.1.a specified, in part, that written procedures shall be implemented covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A lists procedure adherence as one of these procedures. Perry Administrative Procedure PAP-528, "Procedure Adherence," Revision 0.2 specifies, in part, that surveillance instructions are to be followed step-by-step. The maintenance technician's failure to follow SVI-R42-T5224 as written is considered a violation of the TS. This Severity Lovel IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CR 99-0332. (NCV 50-440/99001-01(DRP)).

#### c. <u>Conclusions</u>

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The inspectors concluded that a surveillance test to monitor the condition of the Unit 2, Division 3 battery was not conducted in accordance with the procedure. This failure to follow an approved procedure was considered a Non-Cited Violation of NRC requirements.

# M1.3 Improper Equipment Storage in Safety-Related Areas of the Plant

#### a. Inspection Scope (71707, 62707)

The inspectors followed the guidance of IP 71707 and 62707 and conducted walkdowns to assess housekeeping and equipment control in safety-related areas of the plant.

# b. Observations and Findings

During walkdowns of the auxiliary building and the control complex, the inspectors identified the following instances where items were staged in plant areas contrary to the plant housekeeping policy and transient combustible program:

- The inspectors identified 2 large piles of items stored near the safety-related control complex chillers. Desks, chairs, filing cabinets, and carpeting materials had been moved there due to remodeling of an office space nearby. The inspectors questioned the practice of storing items near safety-related equipment when those items were not necessary to support work activities on the equipment. After further discussions with the fire protection engineer and plant manager, the inspectors were informed that a transient combustible permit had been approved for the items. The inspectors and licensee determined that several items were closer to the chillers than allowed by procedure PAP-0204, "Housekeeping/Cleanliness Control Program." Condition Report 99-0295 was written on February 9, 1999, to document this issue.
- On January 14, the inspectors identified that a ladder was tied to safety-related conduit in the control rod drive rebuild room. The ladder was promptly removed and CR 99-0112 was initiated. The investigation did not determine when or why the ladder was tied to the conduit. This was another example where the clearance requirement of PAP-0204 was not adhered to.
- On February 1, 1999, the inspectors identified another instance where items stored near safety-related equipment were not necessary to support any work activities in the area. Desks, boxes, tools, and containers of combustible liquids were temporarily stored in the Unit 2, Division 2 switchgear room due to an office rencvation. Transient Combustible Permits had been initiated for some, but not all of the items. Specifically, there was no permit for the combustible liquids. The licensee immediately removed the items and initiated CR 98-0223.

The three examples above represent three examples of failure to follow PAP-0204. Section 6.1.1.7.b of PAP-0204 required a clearance of at least 1.5 times the height of the stored item. This failure to follow PAP-204 as required by 10 CFR Part 50, Appendix B, Criterion V, constitutes a violation. This Severity Level IV violation is being treated as an NCV, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CRs 99-0223, 99-0112, and 99-0295. (NCV 50-440/99001-02(DRP)).

#### c. Conclusions

Plant personnel failed to adhere in all cases to plant procedures governing the storage of items near safety-related equipment. One Non-Cited Violation was identified concerning this issue.

# M8 Miscellaneous Maintenance Issues (92902)

M8.1 (Closed) Licensee Event Report 50-440/98003-00 & 01: Missed TS Surveillance Requirement (SR) on Hydrogen Igniters. The licensee missed a TS SR to perform increased frequency testing of hydrogen igniters when more than four igniters in one Livision were inoperable between March 15 and October 1, 1998. Upon discovery of the missed SR on October 1, 1998, the igniters were promptly tested satisfactorily.

The procedure was revised to ensure that increased frequency testing would be performed in the future when necessary. The failure to perform the increased frequency testing between March 15 and October 1, 1998, was a violation of TS SR 3.6.3.2.2. This non-repetitive, licensee-identified and corrected violation is being treated as an NCV, consistent with Section VII.B.1 of the NRC Enforcement Policy. (NCV 50-440/99001-03(DRP))

### III. Engineering

# E1 Conduct of Engineering

- E1.1 Increased Frequency Battery Performance Testing Not Implemented According to TS
- a. Inspection Scope (37551)

The inspectors followed the guidance of IP 37551 in evaluating the licensee's operability determination and review following identification that the Division 3 batteries may not have been tested at the increased frequency required by TS. This included a review of the Updated Safety Analysis Report and IEEE 450, 1980, which was the standard that the licensee was committed to.

#### b. Observations and Findings

## Background

At the Perry Plant, construction on Unit 2 was not completed; however, some Unit 2 equipment, such as the Unit 2, Division 3 battery, is fully installed, safety-related, tested and maintained operable to support Unit 1 operation. The Unit 1, Division 3 battery is typically line up to the Division 3 DC bus with the Unit 2 battery used as a backup. On February 18, 1999, following questions by the inspectors regarding Unit 1 and Unit 2 Division 3 battery degradation and aging (see Section M1.2), the licensee identified that the batteries were placed on a trickle charge in the warehouse in 1978, which established the beginning of battery life. The licensee's TS SR 3.8.4.8 required

increased frequency of the battery performance test from every 60 months to every 18 months once a battery reached 85 percent of its 20-year service life. The licensee determined that both the Unit 1 and Unit 2 Division 3 batteries had cells that were more than 100 percent of the battery service life. The licensee initiated a CR 99-0364 and performed an operability determination.

# Unit 1 Division 3 Battery

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The licensee's Operability Determination documented that although 9 of the 60 cells were original cells and were approximately 21 years old, the other cells had been replaced over the years for mechanical or electrical reasons. The licensee calculated the age of the battery to be 9.7 years based on the average age of the 60 individual cells. As a result, the licensee determined that the frequency of testing required by TS SR 3.8.4.8 was 60 months for this battery. It did not appear to the inspectors that calculating an effective age for the battery was technically justified. The last performance test had been completed on October 7, 1996; therefore, if the 18-month frequency was applicable, the surveillance test was past the 25 percent grace period since August 23, 1998. Also, the inspectors observed that the oldest 9 cells visually appeared to be older than other cells and had sediment in the bottom of the jars. The licensee held discussions with the battery manufacturer, who had no concerns the battery would fail in the near term. The inspectors consulted with subject matter experts in the Office of Nuclear Reactor Regulation and needed to review this issue further.

#### Unit 2 Divis n 3 Battery

Since all 60 cells on this battery were approximately 21 years old, and TS SR 3.8.4.8 had not been completed since July 29, 1996, the licensee immediately declared the battery inoperable and initiated plans to perform the performance testing. The test was past the 125 percent grace period since June 13, 1998; however, the Division 3 bus had not been lined up to the Unit 2 battery since June 6, 1998. Therefore, there was no past operability concern regarding this battery. However, the Unit 2 battery had been considered fully operable and the SO' could have allowed its use at any time. The performance test was completed satisfactorily on February 28, 1999 and the Division 3 bus was lined up to the Unit 2 battery. The results of the test showed 88 percent of rated capacity, with a TS acceptance criteria of greater than or equal to 80 percent.

#### Applicable Limiting Conditions for Operation

On February 19, 1999, the licensee identified a leaking relief valve on the RCIC system that required the RCIC system be secured and declared inoperable. With RCIC inoperable, TS 3.5.3.A required that HPCS be verified to be operable within 1 hour or be in Mode 3 within 12 hours and Mode 4 within 36 hours. If both batteries were past their TS SR frequency as discussed above, TS SR 3.0.3 would be applicable, which requires that when it is discovered that a surveillance was not completed within its specified frequency, then declaring the associated LCO may be delayed for up to 24 hours to allow performance of the SR. The licensee did not enter the TS SR 3.0.3 due to its method of calculating the average life of the Unit 1, Division 3 battery and determining that the battery was operable. Pending further NRC review of the acceptability of calculating an average battery age, this is considered an unresolved item. **(URI 50-440/99001-04 (DRP))** 

#### c. <u>Conclusions</u>

The Unit 2, Division 3 battery was declared inoperable after the licensee identified that its age was greater than its rated lifetime and that increased frequency testing was required by Technical Specifications. The battery was subsequently successfully tested. The licensee identified that 9 of 60 cells in the Unit 1, Division 3 battery were beyond the rated service life of 20 years. However, the battery was determined to be operable based on the average age of all of the individual battery cells. An unresolved item concerning the technical justification for calculating the battery age based on the average age of the individual cells was identified.

# E7 Quality Assurance in Engineering

# E7.1 Licensee Corrective Action and Self-Assessment Activities

#### a. Inspection Scope (71707, 37551, 40500)

The inspectors followed the guidance of IP 71707, 37551, and 40500 to review and evaluate portions of the licensee's corrective action program.

#### b. Observations and Findings

During the inspection period, the inspectors reviewed multiple activities associated with the licensee's corrective action program, including:

- Daily Manager Meeting discussion of new CRs
- Corrective Action Review Board (CARB), February 10, 1999
- Closed Condition Reports

The self-assessment activities observed were generally effective. At the daily Manager's Meeting, the manager responsible for each new CR provided a summary of the issue, the assigned category, and a contact person who would be working on the investigation. At the CARB meeting, the inspectors observed thorough discussion of planned corrective actions for several higher level CRs. In one case, the board rejected the CR and requested additional corrective actions to be specified. This CR was brought back to another CARB meeting 2 weeks later and was approved. The inspectors determined that there was an appropriate amount of management attention to the corrective action program.

In one case, the inspectors questioned whether issues identified during an "extent of condition" review were adequately dispositioned upon identification. Condition Report 98-2480 was written on December 1, 1998, after the inspectors questioned the absence of weep holes for certain electrical junction boxes in areas of the plant categorized as environmentally harsh. The CR documented that the missing weep holes in an AEGTS heater controller resulted in a condition that did not match the drawing; however, an operability determination provided technical justification for operability of the AEGTS. The inspectors had no concerns with the initial investigation of the issue, but the "extent of condition" review did not clearly address operability of other items found not to match the drawing. On January 27, 1999, the licensee completed the "extent of condition" review which identified additional junction boxes that did not have weep holes as specified on the drawing. Further review of the condition

was scheduled for completion by the end of March 1999. This did not appear to follow the licensee's corrective action program guidelines, which would have called for communicating the additional items to the control room and performing a prompt (24-hour) operability determination. After further discussion with engineering department management, the CR investigation was revised to clearly address the operability of the items.

c. <u>Conclusions</u>

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The inspectors concluded that there was generally an appropriate amount of management involvement in the corrective action program.

# E8 Miscellaneous Engineering Issues (92903)

- E8.1 (Closed) Violation 50-440/97002-02(DRP): The inspector identified an inadequate Safety Evaluation (SE) for a modification to the emergency closed cooling system. The corrective actions included a revised SE, training to engineering department personnel, and a self-assessment of the licensee's 10 CFR 50.59 safety evaluation process. The corrective actions were reviewed and considered appropriate. This item is closed.
- E8.2 (Closed) URI 50-440/98020-02(DRP): The licensee had identified that a TS SR was potentially missed for a secondary containment isolation valve and initiated CR 98-2142. The licensee was able to demonstrate that several small (3/8" and 1/4") valves addressed by the CR were not required to be classified as secondary containment isolation valves by calculation E61-009, Revision 1. The inspectors reviewed the completed investigation of CR 98-2142 and the calculation. The inspectors determined that the calculation supported the conclusion that the valves are not secondary containment isolation valves; therefore, the TS SR was not applicable. This item is closed.

## V. Management Meetings

## X1 Exit Meeting Summary

The inspectors presented results to members of licensee management at the conclusion of the inspection on February 24, 1999. The licensee acknowledged the findings presented.

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

# PARTIAL LIST OF PERSONS CONTACTED

#### Licensee

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- H. Bergendahl, Director, Nuclear Services Department
- N. Bonner, Director, Nuclear Maintenance Department
- B. Boles, Manager, Plant Engineering
- R. Collings, Manager, Quality Assurance
- H. Hegrat, Manager, Regulatory Affairs
- T. Henderson, Supervisor, Compliance
- W. Kanda, General Manager, Nuclear Power Plant Department
- F. Kearney, Superintendent, Plant Operations
- B. Luthanen, Compliance Engineer
- L. Myers, Vice President, Nuclear
- J. Powers, Manager, Design Engineering
- T. Rausch, Operations Manager
- S. Sanford, Senior Compliance Engineer
- R. Schrauder, Director, Nuclear Engineering Department
- J. Sears, Manager, Radiation Protection
- J. Sipp, Manager, Radwaste, Environmental, and Chemistry
- W. Slack, Responsible System Engineer

#### INSPECTION PROCEDURES USED

- IP 37551: Onsite Engineering
- IP 40500: Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems
- IP 61726: Surveillance Observation
- IP 62707: Maintenance Observation
- IP 71707: Plant Operations
- IP 71750: Plant Support
- IP 92700: Onsite Followup of Written Reports of Nonroutine Events at Power Reactor Facilities
- IP 92901: Followup Operations
- IP 92902: Followup Maintenance
- IP 92903: Followup Engineering

# ITEMS OPENED AND CLOSED

# Opened

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50-440/99001-02 NCV Improperties   50-440/99001-03 NCV Missed	to Follow Battery Surveillance Procedure erly Stored Equipment in Plant TS SR on Hydrogen Igniters on Division 3 Batteries
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# Closed

50-440/97002-02	VIO	Inadequate 10 CFR 50.59 Safety Evaluation
50-440/98003-00 & -01	LER	Missed TS SR on Hydrogen Igniters
50-440/98020-02	URI	Secondary Containment Isolation Valves SR
50-440/99001-01	NCV	Failure to Follow Battery Surveillance Procedure
50-440/99001-02	NCV	Improperly Stored Equipment in Plant
50-440/99001-03	NCV	Missed TS SR on Hydrogen Igniters

# LIST OF ACRONYMS USED

AEGTS CFR CR DRP ESW HPCS INPO IP IR LCO LER NCV NRC PAP PDR RCIC	Annulus Exhaust Gas Treatment System Code of Federal Regulations Condition Report Division of Reactor Projects Emergency Service Water High Pressure Core Spray Institute of Nuclear Power Operations Inspection Procedure Inspection Report Limiting Condition for Operation Licensee Event Report Non-cited Violation Nuclear Regulatory Commission Plant Administrative Procedure Public Document Room Reactor Core Isolation Cooling
RHR RRCS	Residual Heat Removal Redundant Reactivity Control System
SE	Safety Evaluation
SOI SR	System Operating Instruction Surveillance Requirements
SVI	Surveillance Instruction
TCP	Transient Combustible Permit
TS	Technical Specification
URI	Unresolved Item
VIO WO	Violation Work Order
000	WORK Order