UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

October 19, 2005

Tennessee Valley Authority
ATTN: Mr. K. W. Singer
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NRC INTEGRATED INSPECTION REPORT 05000390/2005004 AND 05000391/2005004

Dear Mr. Singer:

On September 30, 2005, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Watts Bar Nuclear Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection results which were discussed on October 6, 2005, with Mr. M. Skaggs 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 NRC-identified finding of very low safety significance (Green). The issue was determined to involve a violation of NRC requirements. 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 VI.A of the NRC Enforcement Policy. If you contest the NCV in the enclosed 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 II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Watts Bar facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Stephen J. Cahill, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos. 50-390, 50-391
License No. NPF-90 and Construction
Permit No. CPPR-92

Enclosure: NRC Inspection Report 05000390/2005004, 05000391/2005004
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket Nos:	50-390, 50-391
License Nos:	NPF-90 and Construction Permit CPPR-92
Report Nos:	05000390/2005004, 05000391/2005004
Licensee:	Tennessee Valley Authority (TVA)
Facility:	Watts Bar Nuclear Plant, Units 1 and 2
Location:	1260 Nuclear Plant Road Spring City TN 37381
Dates:	July 1, 2005 - September 30, 2005
Inspectors:	J. Bartley, Senior Resident Inspector M. Pribish, Resident Inspector R. Carrion, Project Engineer (Section 1R06)
Approved by:	Stephen J. Cahill, Chief Reactor Projects Branch 6 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000390/2005004, 05000391/2005004, 07/01/2005 - 09/30/2005, Watts Bar, Units 1 & 2; Event Followup

The report covered a three-month period of routine inspection by resident inspectors and a regional reactor inspector. The significance of an issue is indicated by the color (Green, White, Yellow, Red) using the Significance Determination Process in Inspection Manual Chapter 0609, Significance Determination Process (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, Reactor Oversight Process, Revision 3, dated July 2000.

A. NRC-Identified Findings and Self-Revealing Findings

Cornerstone: Barrier Integrity

- Green. The inspectors identified a violation of Technical Specification 5.7.1.1 for an inadequate procedure for containment closure. The licensee's procedure for containment closure during loss of shutdown cooling events could have resulted in not being able to restore containment availability. This was due to the use of a temporary foam seal, which was not rated for containment pressure, and due to the procedures allowing up to four hours to install blind flanges.

  This finding is more than minor because it affected the configuration control attribute of the Barrier Integrity Cornerstone for the reactor containment. The temporary penetration seals relied upon for containment closure were not leak tight and would fail if the containment pressurized. This finding was of very low safety significance because the time duration with the reactor coolant system depressurized and vented with the vessel head on, one charging pump and two safety injection pumps was short, and all four diesel generators (DGs) were available, and the Unit 2 DGs can backfeed the Unit 1 shutdown boards. The finding was entered into the licensee corrective action program as problem evaluation report (PER) 79310. The cause of this finding (inadequate technical evaluations) impacts the human performance cross-cutting area. (Section 4OA3)

B. Licensee-Identified Violations

None.

Report Details

Summary of Plant Status

Unit 1 operated at or near 100 percent power until September 9 when the unit was ramped down to 25 percent power for maintenance on a reactor coolant flow transmitter and sample piping. The unit was returned to 100 percent power on September 12 and remained at or near 100 percent power for the remainder of the report period. Unit 2 remained in a suspended construction status.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

On August 29 and 30, 2005, the inspectors reviewed licensee actions in preparation for heavy winds and rain from Hurricane Katrina. In addition, the inspectors reviewed licensee actions for a tornado watch that resulted from the remnants of Hurricane Katrina to verify that the actions were in accordance with Abnormal Operation Instruction (AOI) 8, Tornado Watch or Warning. The inspectors toured the affected plant grounds inside the protected area to identify any loose debris which could become missiles during high winds or a tornado event and checked for items which could block or interfere with site drains. Additional documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted three equipment alignment partial walkdowns to evaluate the operability of selected redundant trains or backup systems, listed below, with the other train or system inoperable or out of service. The inspectors reviewed the functional system descriptions, Updated Final Safety Analysis Report (UFSAR), system operating procedures, and Technical Specifications (TS) to determine correct system lineups for the current plant conditions. The inspectors performed walkdowns of the systems to verify that critical components were properly aligned and to identify any discrepancies which could affect operability of the redundant train or backup system. Additional documents reviewed are listed in the attachment.

- B-train electric boardroom (EBR) chiller during A-train EBR chiller outage
- A-train centrifugal charging pump (CCP) and safety injection pump during B-train CCP component outage

- B-train auxiliary feedwater (AFW) during testing of 1A-A motor-driven AFW pump level control valves

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted tours of twelve areas important to reactor safety, listed below, to verify the licensee's implementation of fire protection requirements as described in the Fire Protection Program, Standard Programs and Processes (SPP)-10.0, Control of Fire Protection Impairments, SPP-10.10, Control of Transient Combustibles, and SPP-10.11, Control of Ignition Sources (Hot Work). The inspectors evaluated, as appropriate, conditions related to: (1) licensee control of transient combustibles and ignition sources; (2) the material condition, operational status, and operational lineup of fire protection systems, equipment, and features; and (3) the fire barriers used to prevent fire damage or fire propagation.

- Auxiliary instrument room
- 1A-A and 1B-B diesel generators (DG)
- 2A-A and 2B-B DG
- A-train and B-train essential raw cooling water (ERCW) pumps
- A-train and B-train high pressure fire pumps
- A-train and B-train ERCW strainers
- ERCW traveling screen rooms

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors reviewed licensee flood analysis documents to identify design features important to external flood protection and areas that can be affected by flooding; design flood levels; and protection features for areas containing safety-related equipment, such as level switches and sumps. The inspectors reviewed licensee instructions to cross-tie systems in the event of severe flooding. The inspectors also reviewed selected problem evaluation reports (PERs) written during CY 2004 and through June 2005 with respect to flood-related items. The inspectors walked down the lower level of the intake pumping structure to observe material condition of its flooding protection features such as doors, floor drains, sump level switches, and sump pumps. In addition, the inspectors reviewed four maintenance instructions for installing spool pieces to verify

that the procedures could be accomplished as written and that the required equipment and tools were available. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

On August 9, 2005, the inspectors observed operators in the plant's simulator during licensed operator requalification training to verify that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with procedures TRN-1, Administering Training, and TRN-11.4, Continuing Training for Licensed Personnel. The inspectors observed a shift crew's response to scenario 3-OT-SRT0151, Multiple Steam Generator Tube Rupture Event.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the two performance-based problems listed below. The focus of the reviews was to assess the effectiveness of maintenance efforts that apply to scoped structures, systems, or components (SSCs) and to verify that the licensee was following the requirements of Technical Instruction (TI)-119, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting 10 CFR 50.65, and SPP-6.6, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting 10 CFR 50.65. Reviews focused, as appropriate, on: (1) appropriate work practices; (2) identification and resolution of common cause failures; (3) scoping in accordance with 10 CFR 50.65; (4) characterization of reliability issues; (5) charging unavailability time; (6) trending key parameters; (7) 10 CFR 50.65 (a) (1) or (a) (2) classification and reclassification; and (8) the appropriateness of performance criteria for SSCs classified as (a)(2) or goals and corrective actions for SSCs classified as (a)(1). Additional documents reviewed are listed in the attachment.

- PER 82775, Terry turbine oil out of specified warning limits
- PER 89109, A-train EBR chiller compressor developed an oil leak following compressor replacement

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors evaluated, as appropriate for the four work activities listed below: (1) the effectiveness of the risk assessments performed before maintenance activities were conducted; (2) the management of risk; (3) that, upon identification of an unforseen situation, necessary steps were taken to plan and control the resulting emergent work activities; and (4) that maintenance risk assessments and emergent work problems were adequately identified and resolved. The inspectors verified that the licensee was complying with the requirements of 10 CFR 50.65 (a)(4); SPP-7.0, Work Control and Outage Management; SPP-7.1, Work Control Process; and TI-124, Equipment to Plant Risk Matrix. Additional documents reviewed are listed in the attachment.

- Maintenance risk during A-train EBR chiller outage with 2A-A diesel generator (DG) monthly load run
- Maintenance risk during A-train EBR chiller outage and 1A-A residual heat removal (RHR) pump oil flush
- Assessment of workweek 805 schedule due to inclement weather from Hurricane Katrina and resultant transmission system alert
- B-train hydrogen analyzer component outage extended into A-train workweek

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors reviewed personnel performance in response to a small reactor coolant system (RCS) leak (approximately 0.2 gallons per minute) inside containment from an RCS sample line. Due to the leak location, the licensee elected to reduce reactor power to approximately 25% power to isolate the sample line. The inspectors observed portions of the downpower and subsequent power escalation. The inspectors also reviewed operator logs, RCS leakage calculations, and plant computer data to determine if operator responses were in accordance with the response required by procedures and training. Additional documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed four operability evaluations affecting risk-significant mitigating systems, listed below, to assess, as appropriate: (1) the technical adequacy of the evaluations; (2) whether continued system operability was warranted; (3) whether other existing degraded conditions were considered as compensating measures; (4) whether the compensatory measures, if involved, were in place, would work as intended, and were appropriately controlled; (5) where continued operability was considered unjustified, the impact on TS Limiting Conditions for Operation and the risk significance in accordance with the NRC Significance Determination Process (SDP). The inspectors verified that the operability evaluations were performed in accordance with SPP-3.1, Corrective Action Program.

- Operability evaluation of containment spray heat exchanger while placing shell-side in fresh water layup
- PER 85667, N2 supply pressure to turbine-driven auxiliary feedwater (TDAFW) level control valves
- PER 85969, Safety injection system relief valve leak
- PER 86846, CCP 1B-B lube oil reservoir leak

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed five post-maintenance test (PMT) procedures and/or test activities, as appropriate, for selected risk-significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents; (4) test instrumentation had current calibrations, range, and accuracy consistent with the application; (5) tests were performed as written with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and (8) equipment was returned to the status required to perform its safety function. The inspectors verified that these activities were performed in accordance with SPP-8.0, Testing Programs; SPP-6.3, Pre-/Post-Maintenance Testing; and SPP-7.1, Work Control Process. Additional documents reviewed are listed in the attachment.

- WO 05-810852-000, A-train auxiliary control air dryer limit switch replacement
- WO 04-813965-000, A-train EBR chiller complete inspection and refrigerant, oil, and seal replacement

- WO 04-816930-000, A-train EBR chiller 75,000-hour maintenance inspection
- WO 03-016475-013, 1B-B CCP breaker HFA relay replacement
- WO 05-819140-000, Limit switch adjustment on 1-FCV-3-179A, TDAFW pump B-train ERCW suction isolation

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed five surveillance tests and/or reviewed test data of selected risk-significant SSCs, listed below, to assess, as appropriate, whether the SSCs met the requirements of the TS; the UFSAR; SPP-8.0, Testing Programs; SPP-8.2, Surveillance Test Program; and SPP-9.1, ASME Section XI. The inspectors also determined whether the testing effectively demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions. Additional documents reviewed are listed in the attachment.

- WO 05-119370-000, 1-SI-99-10-B, 31-day Functional Test of Solid State Protection System Train-B and Reactor Trip Breaker B
- WO 05-132850-000, 1-SI-72-901-A,1A-A RHR Quarterly Performance Test*
- WO 05-810434-000, 1-SI-90-13, 92-day Channel Operational Test of the Containment Lower Compartment Particulate Rad Monitor Loop 1-LPR-90-106A**
- WO 05-813490-000, 1-SI-43-211, 31-day Channel Operational Test LOCA Containment Hydrogen Analyzer Train-B
- WO 05-103410-000, 0-SI-236-55, 125-VDC Vital Battery V 60-Month Performance Test

* Inservice Testing
** Reactor Coolant System leakage detection surveillance

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed Temporary Alteration 1-05-0004-90 which activated software on the plant process computer system to provide technical specification operability for RCS leakage detection instrumentation by providing a computer-generated alarm and control room annunciator associated with 1-RM-90-106B-A (lower containment radiation

monitor) and 1-RM-90-112B-B (upper containment radiation monitor). The inspectors verified that the temporary alteration was performed in accordance with SPP-9.5, Temporary Alterations, and SPP-9.4, 10 CFR 50.59 Evaluation of Changes, Test, and Experiments, and verified that the modification did not affect system operability or availability as described by the TS and UFSAR. In addition, the inspectors verified that the installation of the temporary modification was in accordance with the work package, that adequate configuration control was in place, procedures and drawings were updated, and post-installation tests verified operability of the affected systems.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification & Resolution of Problems

.1 Daily Reviews

As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program (CAP). This review was accomplished by reviewing daily PER summary reports and attending daily PER review meetings.

.2 Annual Sample Review

a. Inspection Scope

The inspectors reviewed the licensee's assessment and corrective actions associated with PER 65933 for a secondary chemistry excursion caused by resin beads in the primary makeup water system. The resin beads were introduced into the system by operator error at the pure water plant. The report was reviewed to ensure that the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified, prioritized, and completed. The inspectors also evaluated the report against the requirements of the licensee's corrective action program as specified in SPP-3.1, Corrective Action Program, and 10 CFR 50, Appendix B. Additional documents reviewed are listed in the attachment.

b. Findings and Observations

There were no findings identified associated with the reviewed sample. The inspectors verified that the root cause evaluation and associated corrective actions were appropriate relative to the identified problem.

4OA3 Event Followup

(Closed) Apparent Violation (AV) 05000390/2005003-01: Inadequate Procedures for Containment Closure

Introduction: A Green NCV was identified for inadequate procedures for restoring containment availability following a loss of shutdown cooling. The inadequate procedures incorrectly stated that emergency closure was not required for Penetration X-117 and allowed up to four hours to restore other temporary containment penetrations following a loss of shutdown cooling.

Description: Unresolved Item (URI) 05000390/2005002-04 documented the inspectors' determination that the procedures for restoring containment following a loss of shutdown were inadequate. The URI was opened pending completion of full-scale testing to determine if there was a loss of function, i.e., would the temporary room temperature vulcanizing silicon foam seals remain leak-tight during expected containment conditions following a loss of shutdown cooling. The URI was closed to AV 05000390/2005003-01 based on licensee testing which demonstrated that the seals were not leak tight at as low as 0.5 pounds per square inch gauge (psig) and the test seal failure at 3.2 psig.

Analysis: The finding adversely affected the containment availability during loss of shutdown cooling events. The inspectors referred to Manual Chapter (MC) 0612 and determined that the finding is more than minor because it affected the configuration control attribute of the Barrier Integrity Cornerstone for the reactor containment in that containment closure would not be accomplished during a loss of shutdown cooling event.

The inspectors used MC 0609, Appendix H, Containment Integrity SDP, to perform the Phase 1 and 2 analysis, documented in Section 4OA3 of NRC Inspection Report 05000390 and 391/2005003. A Phase 3 analysis was required because the Phase 2 result was greater than Green.

The large early release frequency (LERF) risk metric was used for the Phase 3 analysis to assess the risk of the finding. The core damage frequency (CDF) estimate was reduced to CDF sequences that would result in core damage before evacuation of the public. The analysis focused on the time period when the steam generators were not available for decay heat removal and gravity feed was not available. This 38-hour time period initiated when the primary safety valves were opened until lifting of the reactor vessel head was initiated. Therefore, only the shutdown core damage sequences which involve an extended loss of the RHR function and prompt failure of RCS injection to reestablish core cooling resulted in a LERF scenario. The following three potential LERF scenarios were evaluated.

- Losses of RCS inventory that result in loss of the RHR function followed by failure of short-term RCS injection (losses of level control during midloop were not included since the licensee does not perform hot midloops by TVA policy)

- Station blackout (SBO) followed by prompt failure of gravity injection and alternating current power recovery
- Extended loss of the RHR function and prompt failure of RCS injection.

Mitigation capability credited in the analysis:

- two safety injection pumps and one CCP were available for RCS injection
- core exit thermocouples and three hot leg resistance temperature devices were available
- all four DGs were available with the capability to backfeed Unit 1 shutdown boards from the Unit 2 DGs

The significance for this finding was determined by calculating the increase in LERF accounting for the LERF CDF from the scenarios discussed above, containment closure probability, and a multiplier for the degraded condition. This resulted in the characterization of very low safety significance (Green). This finding affects the human performance cross-cutting area in that the evaluations performed in 1999 to allow the use of these seals and not provide for emergency closure of penetration X-117 were inadequate.

Enforcement: TS 5.7.1.1 requires that written procedures be established, implemented, and maintained for the activities specified in Regulatory Guide (RG) 1.33, Revision 2, Appendix A. Item 6.h. of RG 1.33 states that implementing procedures are required for combating the loss of shutdown cooling. Abnormal Operating Instruction (AOI)-14, Loss of RHR Shutdown Cooling, was established and implemented to combat the loss of shutdown cooling. AOI-14 directed establishing containment closure using TI-68.002. Contrary to this, from February 25, 2005 through March 21, 2005, AOI-14 and TI-68.002 were not adequately established to assure that containment closure would be achieved prior to the time at which a core uncovery and fission product release could result from a loss of shutdown cooling. Specifically, there were no emergency closure actions for penetration X-117, and four hours were allowed for emergency closure of the blind flanges for penetrations X-54, X-108, X-109, and X-118. This finding does not present an immediate safety concern because these penetrations have been restored to their required condition for containment integrity. This finding is identified as NCV 05000390/2005004-01, Inadequate Procedures for Containment Closure. AV 05000390/2005003-01 is closed.

4OA4 Cross-cutting Issues

Section 4OA3 describes a finding associated with an inadequate procedure for restoring containment availability after a loss of shutdown cooling. The human performance aspect of this finding was previously documented in Section 4OA4 of NRC Inspection Report 05000390/2005003 and 05000391/2005003.

4OA5 Other

Temporary Instruction (TI) 2515/163, Operational Readiness of Offsite Power

Completion of this TI was documented in NRC Inspection Report 05000390, 391/2005003. However, after an NRC headquarters review of the data provided, additional information related to the TI was requested. The inspectors collected this information from licensee discussions, site procedures, and licensee documentation. The information was subsequently provided to the headquarters staff for further analysis.

4OA6 Meetings, including Exit

On October 6, 2005, the inspectors presented the inspection results to Mr. M. Skaggs and other members of licensee management. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION
PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. DeRoche, Site Nuclear Assurance Manager
D. Feldman, Training Manager
J. Frisco, Site Engineering Manager
A. Hinson, Maintenance and Modifications Manager
G. Laughlin, Plant Manager
P. Pace, Licensing and Industry Affairs Manager
M. Skaggs, Site Vice President
S. Smith, Operations Superintendent
D. White, Operations Manager

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

50-390/2005004-01	NCV	Inadequate Procedures for Containment Closure (Section 4OA3)

Closed

50-390/2005003-01	AV	Inadequate Procedures for Containment Closure (Section 4OA3)

Attachment

LIST OF DOCUMENTS REVIEWED

Section 1R01
- PER 88511, 12 ft by 1.5 ft sheet of heavy rubber fabric found unsecured in the high voltage switchyard

Section 1R04
- PER 85961, Metal insulation covering laying on top of ERCW instrument lines
- PER 89993, DG 1A2 air dryer skid bypassed found open when required to be tagged shut

Section 1R06
- Updated Final Safety Analysis Report (UFSAR) Sections 2.4.14, Flooding Protection Plan; 3.4, Water Level (Flood) Design; 3.6, Protection Against Dynamic Effects Associated with the Postulated Rupture of Piping; 3.8, Design of Category I Structures; 3.8.1, Concrete Shield Building; 3.8.2, Steel Containment System; and 3.8.4, Other Category I Structures, including related figures and drawings
- Technical Requirement Manual Section 3.7.2, Flood Protection Plan
- Abnormal Operating Instruction (AOI)-7.01, Maximum Probable Flood
- MI-17.018, Flood Preparation - High Pressure Fire Protection System Spool
- MI-17.019, Flood Preparation - Auxiliary Charging System Spool Piece
- MI-17.021, Installation of Spool Pieces Between ERCW System and Component Cooling System
- MI-17.022, Flood Preparation - Installation of Spool Pieces Between SFPC System and RHR System
- Problem Evaluation Report (PER) 62660, Evaluate the five identified areas for potential for debris to enter active ERCW components
- PER 66826, Runoff from employee parking lot and the areas south of the office building and west of the turbine building will flow along the perimeter road west of the switchyard and drain into the area surrounding the chemical holdup ponds
- PER 69447, Water was found coming out of cable 0-4PL-63-1692 which supplies the Unit 2 RWST heaters
- PER 72870, To address the apparent lack of instruction in regard to WBN utilizing raw water from the High Pressure Fire Protection System as a water source for Aux Charging after depletion of all other preferred water sources

Section 1R13
- PER 87280, Refrigerant bottles stored in the B-train electric boardroom chiller protected boundary

Section 1R19
- PER 87799, Documentation errors in WOs 04-816390-000 and 04-813965-000
- PER 88230, PMT section for WO 04-813965-000 did not reference the operational checks which is a required PMTs per TI-126

Section 1R22
- PER 88631, 125-VDC battery 60-month performance test incorrectly scheduled in lieu of 18-month service test