

December 11, 2001

Mr. John K. Wood
Vice President - Nuclear
FirstEnergy Nuclear Operating Company
P. O. Box 97, A200
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT
NRC INSPECTION REPORT 50-440/01-13

Dear Mr. Wood:

On November 18, 2001, the NRC completed an inspection at your Perry Nuclear Power Plant. The enclosed report documents the inspection findings which were discussed on November 19, 2001, with you 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.

Based on the results of this inspection, the inspectors identified one issue of very low safety significance (Green) that was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this Non-Cited Violation, you should provide a response with a basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Perry Nuclear Power Plant.

In accordance with 10 CFR 2.790 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

Original signed by
Christine A. Lipa

Christine A. Lipa, Chief
Branch 4
Division of Reactor Projects

Docket No. 50-440
License No. NPF-58

Enclosure: Inspection Report 50-440/01-13

cc w/encl: B. Saunders, President - FENOC
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Maintenance Department
G. Dunn, Manager, Regulatory Affairs
K. Ostrowski, Director, Nuclear
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T. Rausch, Director, Nuclear
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-440
License No: NPF-58

Report No: 50-440/01-13

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Perry Nuclear Power Plant, Unit 1

Location: P.O. Box 97 A200
Perry, OH 44081

Dates: October 1 through November 18, 2001

Inspectors: Steven Sanchez, Acting Senior Resident Inspector
Rene Vogt-Lowell, Resident Inspector
John Ellegood, Resident Inspector
Raymond Powell, Resident Inspector Point Beach
Stephen Campbell, Senior Resident Inspector Fermi
Katherine Green-Bates, Reactor Engineer

Approved by: Christine A. Lipa, Chief
Branch 4
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000440-01-13; on 10/01-11/18/2001; FirstEnergy Nuclear Operating Company; Perry Nuclear Power Plant. Reactor Operations.

This report covers a 7-week routine inspection. The inspection was conducted by resident inspectors and a regional inspector. One finding of very low risk significance was identified during this inspection and was considered to be a Non-Cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violations.

A. Inspection Findings

Green. The licensee failed to have procedures appropriate to the circumstances to prescribe maintenance on the emergency service water sluice gates. As a result, all three trains of emergency service water were rendered inoperable for the periods of time that the gates were disabled in the open position. This was considered to be a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V.

This issue was determined to be of very low safety significance due to the availability of the nonsafety-related service water system and credit for manual operator action, either of which would fully mitigate the adverse effects of the open sluice gates.
(Section 4OA3)

B. Licensee Identified Violations

None

Report Details

Summary of Plant Status: The plant began the inspection period with Unit 1 at 99.9 percent power due to a non-conservative thermal heat balance calculation. On October 18, power was restored to 100 percent after an adjustment was made to the moisture content value used in the thermal heat balance calculation. On October 23, power was temporarily reduced to 90 percent for fuel defect verification sampling. Power was returned to 100 percent later that day. On October 28, power was temporarily reduced to 72 percent for control rod sequence exchange and scram time testing. Power was returned to 100 percent the next day and was maintained at that level for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R02 Evaluation of Changes, Test, or Experiments (71111.02)

a. Inspection Scope

The inspectors reviewed 14 safety evaluations performed pursuant to Federal Regulations 10 CFR 50.59. The safety evaluations were related to temporary and permanent plant modifications, set-point changes, procedure changes, potential conditions adverse to quality, and changes to the licensee's updated safety analysis report. The inspectors confirmed that the safety evaluations were thorough and that prior NRC approval was obtained when appropriate. The inspectors also reviewed 10 safety evaluation screenings, where the licensee had determined that a 10 CFR 50.59 safety evaluation was not necessary. In regard to the changes reviewed where no 10 CFR 50.59 safety evaluation was performed, the inspectors reviewed the changes to verify that a 10 CFR 50.59 safety evaluation was not required. These safety evaluations and screenings were chosen based on risk significance of samples from the different cornerstones. Documents reviewed during the inspection are listed at the end of the report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04Q)

Partial System Walkdown

a. Inspection Scope

The inspectors conducted a partial alignment walkdown of the Division 2 Emergency Diesel Generator (EDG), a risk important system, to evaluate its readiness while the Division 1 train was out of service for maintenance. The walkdown included selected switch and valve position checks, reviewing associated operating procedures in effect,

and verification of electrical power to critical components. The inspectors reviewed sections of the Updated Safety Analysis Report (USAR) and Technical Specifications (TS) as applicable to the walkdown. The documents used for the walkdown are listed in the attached List of Documents Reviewed.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

The inspectors walked down selected risk significant areas looking for any fire protection issues related to: the control of transient combustibles; ignition sources; fire detection equipment; manual suppression capabilities; passive suppression capabilities; automatic suppression capabilities; and barriers to fire propagation. The inspectors reviewed various fire protection procedures and drawings. The specific procedures and drawings used are listed in the attached List of Documents Reviewed. Areas walked down were the accessible portions of the following areas:

- Division 1 Emergency Diesel Generator Room
- Division 3 Emergency Diesel Generator Room
- High Pressure Core Spray Pump Room

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12Q)

a. Inspection Scope

The inspectors reviewed equipment issues, surveillance test failures, and other performance problems for the systems or components listed below. The inspectors reviewed whether the components were properly scoped in accordance with the Maintenance Rule, whether failures were properly characterized, and whether the performance criteria were appropriate. In addition, the inspectors reviewed condition reports associated with implementation of the maintenance rule to determine if the licensee was identifying problems and entering them in the corrective action program.

The inspectors reviewed the Emergency Operating Procedures, probabilistic risk assessment on conditional probabilities, and the control room logs, for the reactor core isolation cooling (RCIC) system, to determine whether the maintenance rule program had been implemented appropriately by assessing the characterization of failed structures, systems, and components. The inspection also included interviews with the maintenance rule senior system engineer, who described program implementation and maintenance rule systems tracking via plant databases. The inspectors also determined whether goal setting and performance monitoring were adequate. The problem

identification and resolution condition reports (CR) reviewed are listed in the attached List of Documents Reviewed.

- Reactor Core Isolation Cooling System
- High Pressure Core Spray System

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors evaluated the adequacy, accuracy, and completeness of plant risk assessments performed prior to changes in plant configuration for maintenance activities. The inspectors determined if the licensee entered the appropriate risk category in accordance with plant procedures. Specifically, the inspectors reviewed:

- Division 1 EDG removal from service for scheduled maintenance
- Motor Driven Feedwater Pump removal from service for scheduled maintenance

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the technical adequacy of CR 01-3679 to verify that operability of the EDG lube oil system was consistent with TS, the USAR, 10 CFR Part 50 requirements, and NRC Generic Letter 91-18, Revision 1, "Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded And Nonconforming Conditions." The CR evaluates a discrepancy between Vendor Drawing 4549-57-0124 and the as-found lube oil supply line piping support configuration. Specifically, three clamp-type supports were shown on the drawing, and used in seismic load stress calculations, while only two were actually installed. Included in the licensee's Operability Determination was a technical evaluation of the condition and proposed change to Calculation R43-11 which concluded that piping stress would remain within ASME Code allowable values with the two-clamp configuration.

The inspectors reviewed the technical adequacy of CR 01-3628 to verify that operability of the Division 1 EDG building ventilation system was consistent with TS, the USAR, 10 CFR Part 50 requirements, and NRC Generic Letter 91-18. The CR was written following identification of a recirculation damper that was not in the expected closed position. The open recirculation damper directs some air from inside the room to the suction of the ventilation fan reducing air flow compared with the nominal values. The analysis showed that there was adequate flow to support EDG operation and operability

at full rated load up to an outside air temperature of 89 degrees Fahrenheit.

The inspectors monitored licensee activities to verify that operability issues were being identified at an appropriate threshold, consistent with 10 CFR 50, Appendix B requirements, and licensee administrative procedure NOP-LP-2001, "Condition Report Process," and that on-line risk was assessed when plant problems were identified.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors evaluated the following post-maintenance testing activities for risk significant systems to assess the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed; acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate; tests were performed as written; and equipment was returned to its operational status following testing. The inspectors evaluated the activities against TS, the USAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications. In addition, the inspectors reviewed CRs associated with post-maintenance testing to determine if the licensee was identifying problems and entering them in the corrective action program. The specific procedures and CRs reviewed are listed in the attached List of Documents Reviewed. The specific post-maintenance activities evaluated included:

- Residual Heat Removal B Pump and Valve Operability Test following planned maintenance
- Standby Liquid Control A Pump and Valve Operability Test following planned maintenance
- Division 1 Diesel Generator Recirculation Damper Testing following planned maintenance

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed surveillance testing or reviewed test data for risk-significant systems or components to assess compliance with TS, 10 CFR Part 50 Appendix B, and licensee procedure requirements. The testing was also evaluated for consistency with the USAR. The inspectors verified that the testing demonstrated that the systems were ready to perform their intended safety functions. The inspectors reviewed whether test control was properly coordinated with the control room and performed in the sequence

specified in the surveillance instruction, and if test equipment was properly calibrated and installed to support the surveillance tests. The procedures reviewed are listed in the attached List of Documents Reviewed. The specific surveillance activities assessed included:

- SVI-E51-T2001, RCIC Pump and Valve Operability Test
- SVI-R43-T1318, Diesel Generator Start and Load Division 2
- SVI-E22-T1319, Diesel Generator Start and Load Division 3

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed the licensee's condition reports (CRs) concerning 10 CFR 50.59 safety evaluations and screenings to verify that the licensee had an appropriate threshold for identifying issues. The inspectors evaluated the effectiveness of the corrective actions for the identified issues. Documents reviewed during the inspection are listed at the end of the report.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 (Closed) Licensee Event Report (LER) 50-440/2000-05-00&01, "Unrecognized Design Requirement for Emergency Service Water Resulted in Operation Outside Design Bases"

a. Inspection Scope

The inspectors reviewed the LER, the design bases for the emergency service water (ESW) system, applicable calculations and risk assessments, and the licensee's corrective action documents.

b. Findings

Green. One finding of very low safety significance (Green), a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have procedures appropriate to the circumstances to

ensure ESW system operability during maintenance on the sluice gates, an activity affecting quality. This LER is closed.

On November 1, 2000, a condition was identified that had resulted in operation outside of the plant's design basis during periodic operation with the ESW sluice gates open. With the ESW alternate intake sluice gates open, recirculated discharge water would raise the ESW suction temperature above the design input value resulting in potential inadequate cooling during a design basis accident. The increasing temperatures would be fully mitigated by pre-alignment of ESW discharge valves (swale valves), which would redirect the warm discharge water to the plant yard area (swale) instead of the normal discharge line. The licensee had performed a calculation in February 1999, which concluded that maintenance on the sluice gates could be performed without pre-alignment of the swale valves, as long as lake temperature was below 41.5 degrees Fahrenheit. In November 2000, the licensee determined that the calculation was incorrect and that the gates should not be opened at any lake temperature without pre-aligning the discharge to the swale. The procedures controlling the sluice gate maintenance in March 2000 did not have adequate controls to ensure ESW system operability was maintained. Specifically, the Work Order, which incorporated the 1999 calculation, did not require pre-aligning the swale valves prior to opening the sluice gates and performing maintenance. This rendered all three trains of ESW inoperable for the period of time that the gates were open and not able to be closed.

Since the issue affected operability of the ESW system, the inspectors concluded that this issue had a credible impact on safety and could potentially impact the operability of the ESW system, a support system for several mitigating systems. In reviewing past instances where the sluice gates were disabled in the open position for maintenance, the licensee initially did not identify any instances of concern until questioned further by the inspectors. Based on further review by the licensee, there were several instances (approximately 24 hours total duration in 2000) where the gates were opened and removed from service, such that operator restoration of the gate would have been difficult. In those cases, mitigation of an event would require dispatching an operator to the auxiliary building to reposition the swale valves. Upon conducting the Phase 1 SDP, the inspectors concluded that the finding was potentially risk significant. The inspectors consulted with the Regional Senior Risk Analyst to perform an SDP risk assessment in accordance with MC 0609, Appendix A. Overall, the Phase 2 SDP assessment concluded that this issue has very low risk significance. The licensee provided additional analysis that concluded that the operators would have approximately 4 hours to take manual action before ESW inlet temperatures would exceed the design value. The 4 hours provides a reasonable amount of time for identification of the condition and directing an operator to reposition the swale valves. Also, the licensee demonstrated that non safety-related service water would still be available and running following most initiating events and this water would reduce the overall temperature of water in the ESW forebay. The SRA concluded that the safety significance of the degraded ESW system for the 24 hour duration resulted in a very small increase in core damage frequency (Green).

The inspectors determined that the work orders that prescribed the sluice gate maintenance, an activity affecting quality, were not appropriate to the circumstances because there were inadequate controls for ensuring ESW operability during the

maintenance activity. The failure to provide appropriate procedures for this activity is considered a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." This violation is associated with an inspection finding that is characterized by the SDP process as having very low risk significance (i.e. Green) and is being treated as a Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 50-440/01-13-01(DRP)). This violation is in the licensee's corrective action program as CR 00-2179 and CR 00-3380.

.2 (Closed) Licensee Event Report (LER) 50-440/2001-04-00, "Licensed Power Limit Exceeded due to Non-Conservative Moisture Carryover Fraction."

On October 1, 2001, the licensee determined that a non-conservative value for the main steam carryover fraction had been applied in calculating reactor core thermal power. This issue was discovered after General Electric issued a report in September 2001 entitled, "Impact of Steam Carryover Fraction on Process Computer Heat Balance Calculations". The use of the non-conservative assumption could have resulted in the reactor being operated above the licensed power level by 0.082%, or approximately 3 megawatts thermal. Upon discovery, operators reduced power by 4 megawatts thermal and entered the issue into the corrective action program. No new findings were identified in the inspector's review. This is a minor violation not subject to formal enforcement. The licensee documented the issue in Condition Report 01-3381. This LER is closed.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. John Wood, Site Vice President and other members of licensee management at the conclusion of the inspection on November 19, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

.2 Interim Exit Meeting

Senior Official at Exit:	Mr. R. Schrauder, Plant Manager
Date:	November 8, 2001
Proprietary:	No
Subject:	Evaluation of Changes, Tests, or Experiments
Change to Inspection Findings:	Yes

KEY POINTS OF CONTACT

Licensee

J. Wood, Vice President-Nuclear
B. Boles, Operations Manager
G. Dunn, Manager, Regulatory Affairs
D. Gudger, Supervisor, Compliance
T. Lentz, Manager, Design Engineering
K. Ostrowski, Director, Nuclear Services Department
D. Phillips, Manager, Plant Engineering
T. Rausch, Director, Nuclear Engineering Department
R. Schrauder, General Manager, Nuclear Power Plant Department
R. Strohl, Superintendent, Plant Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-440/2001-13-01 NCV Inadequate Procedures for Sluice Gate Maintenance

Closed

50-440/2000-5-00 LER Unrecognized Design Requirement for Emergency Service Water Resulted in Operation Outside Design Bases (Section 4OA3)

50-440/2000-5-01 LER Unrecognized Design Requirement for Emergency Service Water Resulted in Operation Outside Design Bases, Revision 1 (Section 4OA3)

50-440/2001-04-00 LER Licensed Power Limit Exceeded due to Non-Conservative Moisture Carryover Fraction (Section 4OA3)

50-440/2001-13-01 NCV Inadequate Procedures for Sluice Gate Maintenance

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
AC	Alternating Current
ASME	American Society of Mechanical Engineers
CFR	Code of Federal Regulations
CR	Condition Report
EDG	Emergency Diesel Generator
ESW	Emergency Service Water
FENOC	FirstEnergy Nuclear Operating Company
HPCS	High Pressure Core Spray
LER	Licensee Event Report
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
PARS	Publicly Available Records
PMT	Post Maintenance Test
RCIC	Reactor Core Isolation Cooling
SDP	Significance Determination Process
SVI	Surveillance Instruction
TS	Technical Specifications
USAR	Updated Safety Analysis Report
WO	Work Order

LIST OF DOCUMENTS REVIEWED

1R02 Evaluation of Changes, Tests or Experiments

Condition Reports Generated by the NRC Inspection

01-3162	Clearance Review 10 CFR 50.59's	August 23, 2001
01-3572	Housekeeping Observations	October 9, 2001
01-3747	10 CFR 50.59 Evaluation Performed for Changes to P-45 SVI's, NRC Identified	October 25, 2001
01-3748	Safety Evaluation 99-0053 (DCP 99-5049) Response to Question 3 Found Inadequate.	October 25, 2001
01-3749	10 CFR 50.59 Program Found to be Minimally Adequate	October 25, 2001
01-3767	Clearances/OATS 10 CFR 50.59 Reviews >90 days	October 25, 2001
01-3777	Fuel Response to NRC 10 CFR 50.59 Concern	October 29, 2001
01-3767	Clearances/OATS 10 CFR 50.59 Reviews >90 days	October 25, 2001

Procedures and Related Documents

PDB-R0001	Operational Requirements Manual Change 31	Revision 0
CA 01-2516-01	License Amendment Request Desk Guide	September 18, 2001
PAP-0204	Housekeeping/Cleanliness	Revision 6
PAP-0103	Plant Operations Review Committee (PORC)	Revision 1
PAP-0305	10 CFR 50.59	Revision 3
NOP-LP-4003	10 CFR 50.59	Revision 0

Safety Evaluations

99-0004	Design Change Package Feedwater Control System	Revision 0
99-0053	RCIC Turbine Exhaust Drain Line	Revision 0
99-0055	ECP 99-8048	Revision 0
99-0056	RHR Penetration P-431	Revision 0
99-0058	Remove RHR Relief Valve	Revision 0
99-0061	Setpoint Change	Revision 0
99-0063	Essential Lighting Panel added to EDG Load	Revision 0
99-0071	DCP 97-6090	Revision 0
99-0072	Permanent Isolation of the Emergency Service Water System (P-45)	Revision 0

01-0001	TXI-321, NobleChem Metals Addition	Revision 0
01-0007	TXI-321, NobleChem Metals Addition	Revision 0
01-0013	DCN 5906 HPCS relief Valves, EDG Supply lines	Revision 0
01-0014	DCP Oscillation Power Range Monitor	Revision 1
01-0019	Drywell Lead Shielding	Revision 1
01-0024	High Vibration Turbine Trip Signal Disabled	Revision 1
01-0029	Air Monitor Control Systems	Revision 0

Safety Screenings

PDB-R0001	Operational Requirements Manual Change 31	Revision 0
CA 01-2516-01	License Amendment Request Desk Guide	September 18, 2001
PAP-0204	housekeeping/Cleanliness	Revision 6
PAP-0103	Plant Operations Review Committee (PORC)	Revision 1
PAP-0305	10 CFR 50.59	Revision 3
NOP-LP-4003	10 CFR50.59	Revision 0

Safety Screenings

CL-2001-S-0020	Disable Ground Detection Unit in Charger 1A,1B,1D,1E and1F	Revision 0
SMRD 00-5027	Replacement of Intake Dampers ESWPH and DG Bldg	Revision 0
SCR 1-00-1041	Setpoint Change LPCS/RHR	Revision 0
SCR 1-00-1043	Setpoint Change LPCS/RHR	Revision 0
SCR 1-00-1058	Revise Setpoint Changes Feedwater RFP Strainer	Revision 0
SVI-R42-T5232	Division 3 Battery Charger 8 Hour Load Test	Revision 2
SVI-R42-T5212	Unit 1, Division 2 Battery Service Test	Revision 6
SVI-R42-T5215	Unit 1, Division 1 Battery Performance Test	Revision 6
SVI-R45-T2001	ASME Values for Pump 1R45-C001A	Revision 9
01-00214	Met Tower input to Emergency Dose Assessment Computer	Revision 0
GMI-021	General Torquing	Revision 3
PDB-R0001	Operations Requirements Manual	Revision 0

1R04 Equipment Alignment

Drawing 302-0352	Standby Diesel Generator Fuel Oil System	March 15, 2001
VLI-R45	Division 1 & 2 Diesel Generator Fuel Oil System (Unit 1), Rev. 4	May 23, 1995
Drawing 302-0351	Standby Diesel Generator Starting Air, Rev. W	July 27, 2000
VLI-R44	Division 1 & 2 Diesel Generator Starting Air System (Unit 1), Rev. 4	June 8, 1988
Drawing 302-0353	Standby Diesel Generator Lube Oil Sys, Rev. P	July 27, 2000
VLI-R47	Division 1 & 2 Diesel Generator Lube Oil System (Unit 1), Rev. 4	March 3, 1989
Drawing 302-0354	Standby Diesel Generator Jacket Water System, Rev. P	July 27, 2000
VLI-R46	Division 1 & 2 Diesel Generator Jacket Water System (Unit 1), Rev. 3	March 2, 1989
TS 3.8.1	AC Sources - Operating	
USAR Section 8.3.1	Onsite Power Systems	

1R05 Fire Protection

Drawing E-023-002	Fire Protection Evaluation - Unit 1 Auxiliary and Reactor Building Plan - El. 574'-10"	
PAP-1920	Periodic Fire Inspection, Rev. 4	December 15, 1992
PAP-1914	Fire Protection System Operability, Rev. 6	April 23, 2001
USAR Section 9A.4.2.1.2.6	Fire Zone 1AB-1f	
National Fire Protection Association	Fire Protection Handbook, Edition 15.	
FPI-1DG	Diesel Generator Building, Rev. 0	March 3, 1989

1R12 Maintenance Rule Implementation

CR 01-0906	ONI-E12-2 Ambiguous on HPCS Role	February 26, 2001
CR 01-1336	Degraded Flange	March 12, 2001
CR 01-1382	Valve Out of Position for LLRT E22T2200	March 13, 2001
CR 01-2445	Tech Spec 3.0.3 Entry Following the 4-29-01 Scram	June 14, 2001

CR 01-2467	HPCS Pump Seal Leakage	June 17, 2001
CR 01-2606	HPCS Pump Suct.M&TE Indication Dur. SVI	July 1, 2001
CR 01-2706	Inadvertent Division 3 Initiation Signal	July 12, 2001
CR 01-2872	HPCS Pump Seal Installation	July 25, 2001
System Health Report	High Pressure Core Spray	1 st Quarter 2001
System Health Report	High Pressure Core Spray	2 nd Quarter 2001
System Health Report	High Pressure Core Spray	3rd Quarter 2001
PAP-1125	Monitoring the Effectiveness of the Maintenance Program Plan, Rev. 6	
Logs	Control Room Logs	01/01/01 - 11/14/01
NUMARC 93-01, Revision 2	Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	
Regulatory Guide 1.160	Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	

1R13 Maintenance Rule Implementation

PAP 1924	On-Line Safety Assessment and Configuration Risk Management	Revision 2, November 30, 2000
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1R19 Post-Maintenance Testing

WO 01-15431-000	Replacement of Division 1 Diesel Generator Recirculation Damper Actuator	
SVI-C41-T2001A	Standby Liquid Control A Pump and Valve Operability Test, Rev. 2	March 30, 1999
PTI-M43-P0005	Diesel Generator Building Ventilation System Damper Stroking - Division 1, Rev. 2	July 17, 1992
WO 01-015431	Replace Div. 1 DG Damper Actuator	
SVI-E12-T2002	RHR B Pump and Valve Operability Test, Rev. 9	February 2, 2001
CR 01-3706	PMT Unsat for Seat Leakage on Control Rod Drive Pump B Discharge Check Valve	October 10, 2001
CR 01-3781	PMTs failed on Breaker XF1A07	October 29, 2001
TS 3.8.1	AC Sources - Operating	

USAR Section 5.4.7	RHR System
USAR 9.3.5	Standby Liquid Control System
USAR 9.4.5.1.4	Diesel Generator Building Ventilation System

1R22 Surveillance Testing

SVI-E51-T2001	RCIC Pump and Valve Operability Test, Rev. 12	August 14, 2001
SVI-R43-T1318	Diesel Generator Start and Load Div. 2, Rev. 8	November 9, 2000
SVI-E22-T1319	Diesel Generator Start and Load Div. 3, Rev. 10	December 14, 2000
SOI-E22B	Division 3 Diesel Generator, Rev. 6	May 11, 1995
TS 3.8.1	AC Sources - Operating	
TS 3.5.3	RCIC System	
USAR Section 8.3.1	Onsite Power Systems	
USAR Section 5.4.6	RCIC System	

4OA2 Problem Identification and Resolution

Condition Reports

PIF 96-3390	Potentially Inadequate Emergency Service Water Pump (1P45C0001A and 1P45C0001B)	July 15, 1996
00-0482	11 Current PORC Members Have Not Completed Training Requirements	Feb.17, 2000
00-0532	Emergency Service Water Pump (1P45C0001A and 1P45C0001B) Change to the Plant	March 2, 2000
00-1944	50.59 Applicability Review Not Performed	June 21, 2000
00-2499	6 MCI's > 6 Months Require a 10 CFR 50.59 Review	August 17, 2000
00-3798	GE12 Fuel Peak Cladding Temperature Change	Oct. 21, 2000
01-0130	Fuel Pool Cooling Relief Valve Gagged Under OAT Rather than Temp Mod and Did Not Receive a Safety Evaluation	January 8, 2001
01-0137	Welder Fabrication Did Not Meet All Requirements	January 8, 2001
01-0463	Control Room Command Function Annual Memo Not Issued Since 1997	February 7, 2001

01-1381	Calculations	March 13, 2001
01-1501	Clearances, 25 Need a 10 CFR 50.59 Safety Evaluation	March 18, 2001
01-2154	GE12 & GE 14 Fuel Peak Cladding Temperature Increase in Cycle 9	May 12, 2001
01-2514	LEERS Did Not Receive Required PORC Review	June 21, 2001
01-2583	90 Day Clock for Temporary Alterations	June 25, 2001
01-2626	Audit PA 01-04 Finding: SMRF-00-5022 Load Combinations Not Consistent with USAR 3.8.3.3	July 2, 2001
01-2670	Audit PA 01-04 PCP Revision 6 PIC-2 Did Not Receive Required PORC Review	July 9, 2001
01-2711	10 CFR 50.59 Evaluation Was Not Performed Due to Incorrect Screening Results	October 11, 2001
01-3121	Work Order 00-7850/SMRF 00-5026	October 11, 2001
01-3163	Clearance Tags Hanging for > 90 days	August 23, 2001
01-3258	Audit PA 01-08 Finding: Fire Permit Issues Related to 10 CFR 50.59	October 11, 2001
01-3598	USAR Chapter 17 Changes Not Updated in the USAR Validation Database	October 11, 2001
01-3646	RFA Safety Relief Valves Leaking Before Reaching Seat Lifting Pressure	October 15, 2001
01-3725	Temporary Alteration Installed > 90 days Without Evaluation Under 10 CFR 50.59	October 15, 2001

4OA3 Event Follow-up

FCR 023963	Field Clarification Request - Sluice Gates, ESW Alternate Intake	February 4, 1999
WO 00-1693	Inspection and Cleaning of ESW Sluice Gate "B"	March 8, 2000
WO 00-1691	Inspection and Cleaning of ESW Sluice Gate "A"	March 8, 2000
CR 01-1796	Sluice Gates - Information for SRA	April 9, 2001
PSA Doc.	PSA Assessment of LER 00-005, Service Water Mitigation of ESW Suction Bay Overheating and Human Error Probability Sensitivity Annunciator Response Instructions	

Perry Emergency Instructions

	Engineering Evaluation of Safety Significance of LER 2000-5	May 4, 2001
Calculation P45-73	ESW Suction Bay Water Temperature to Support LER 2000-005	Rev 0, April 23, 2001
SOI P45/P49	System Operating Instruction, ESW and Screen Wash Systems	Rev 2
CR 00-3380	Sluice Gates, Immediate actions	November 1, 2000
CR 00-1258	Opening Sluice Gates above 41.5F	April 19, 2000
CR 00-2179	Instances where gate was open above 41.5F	July 19, 2000