



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4005

May 13, 2008

Kevin T. Walsh, Vice President
of Operations
Waterford 3
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - NRC INTEGRATED
INSPECTION REPORT 05000382/2008-002

Dear Mr. Walsh:

On April 7, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Waterford Steam Electric Station, Unit 3. The enclosed report documents the inspection results, which were discussed on April 9, 2008, with 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, three NRC-identified and one self-revealing findings of very low safety significance were identified. The findings involved violations of NRC requirements. However, because of their very low safety significance, and because the issues were entered into your corrective action program, the NRC is treating these issues as noncited violations in accordance with Section VI. A. 1 of the NRC Enforcement Policy.

If you contest the subject or severity of any of the noncited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region IV, 611 Ryan Plaza, Suite 400, Arlington, TX 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Waterford Steam Electric Station, Unit 3, 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 made 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ GDReplogle for

Jeffrey A. Clark, P.E.
Chief, Project Branch E
Division of Reactor Projects

Docket: 50-382
License: NPF-38

Enclosure: Inspection Report 05000382/2008-002
w/Attachment: Supplemental Information

cc w/enclosure
Senior Vice President
Entergy Nuclear Operations
P.O. Box 31995
Jackson, MS 39286-1995

Senior Vice President and
Chief Operating Officer
Entergy Operations, Inc.
P.O. Box 31995
Jackson, MS 39286-1995

Vice President, Operations Support
Entergy Services, Inc.
P.O. Box 31995
Jackson, MS 39286-1995

Senior Manager, Nuclear Safety
and Licensing
Entergy Services, Inc.
P.O. Box 31995
Jackson, MS 39286-1995

Site Vice President
Waterford Steam Electric Station, Unit 3
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-0751

Director
Nuclear Safety Assurance
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-0751

General Manager, Plant Operations
Waterford 3 SES
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-0751

Manager, Licensing
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-3093

Chairman
Louisiana Public Service Commission
P.O. Box 91154
Baton Rouge, LA 70825-1697

Richard Penrod, Senior Environmental
Scientist, State Liaison Officer
Office of Environmental Services
Northwestern State University
Russell Hall, Room 201
Natchitoches, LA 71497

Parish President Council
St. Charles Parish
P.O. Box 302
Hahnville, LA 70057

Director, Nuclear Safety & Licensing
Entergy, Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Louisiana Department of Environmental
Quality Radiological Emergency Planning
and Response Division
P.O. Box 4312
Baton Rouge, LA 70821-4312

Louisiana Department of Environmental
Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, LA 70821-4312
Lisa R. Hammond, Chief

Entergy Operations, Inc.

- 4 -

Technological Hazards Branch
National Preparedness Division
FEMA Region VI
800 N. Loop 288
Denton, TX 76209

Electronic distribution by RIV:

Regional Administrator (Elmo.Collins@nrc.gov)
 DRP Director (Dwight.Chamberlain@nrc.gov)
 DRS Director (Roy.Caniano@nrc.gov)
 DRS Deputy Director (Troy.Pruett@nrc.gov)
 Senior Resident Inspector (Ray.Azua@nrc.gov)
 Branch Chief, DRP/E (Jeff.Clark@nrc.gov)
 Senior Project Engineer, DRP/E (George.Replogle@nrc.gov)
 Team Leader, DRP/TSS (Chuck.Paulk@nrc.gov)
 RITS Coordinator (Marisa.Herrera@nrc.gov)

Only inspection reports to the following:

DRS STA (Dale.Powers@nrc.gov)
 J. Adams, OEDO RIV Coordinator (John.Adams@nrc.gov)
 P. Lougheed, OEDO RIV Coordinator (Patricia.Lougheed@nrc.gov)
 R. Kahler, NSIR/DPR/EPD (Robert.Kahler)
 ROPreports
 WAT Site Secretary (Ann.Youngs@nrc.gov)

SUNSI Review Completed: GDR ADAMS: Yes No Initials: GDR
 Publicly Available Non-Publicly Available Sensitive Non-Sensitive
 R:\ REACTORS\ WAT\2008\WAT 2008-02RP-DHO.doc ML 081340721

RIV:RI:DRP/E	SRI:DRP/E	SPE:DRP/E	C:DRRS/EB1	C:DRS/OB
DHOverland	RVAzua	DGReplogle	WBJones	RELantz
/Unavailable/	/RA/ Telephonic	/RA/	/RA/ RLBywater for	/RA/ TMcKernon for
5/ /08	5/9/08	5/13/08	5/13/08	5/13/08
C:DRS/EB2	C:DRS/PSB	C:DRP/E		
LJSmith	MPShannon	JAClark		
/RA/	/RA/	/RA/ GDRreplogle for		
5/13/08	5/13/08	5/13/08		

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets: 50-382

Licenses: NPF-38

Report: 05000382/2008002

Licensee: Entergy Operations, Inc.

Facility: Waterford Steam Electric Station, Unit 3

Location: Hwy. 18
Killona, LA

Dates: January 1 through April 7, 2008

Inspectors: R. Azua, Senior Resident Inspector, Project Branch E
D. Overland, Resident Inspector, Project Branch E

Approved By: Jeffrey Clark, P.E., Chief, Project Branch E
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000382/2008-002; 01/01/2008 – 04/07/2008; Waterford Steam Electric Station, Unit 3; Equipment Alignment, Postmaintenance Testing, Identification and Resolution of Problems. This report covers a 3-month period of inspection by the resident inspectors. This report identifies four Green findings. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 609, "Significance Determination Process." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to implement corrective actions for a condition adverse to quality. Specifically, the licensee developed a corrective action to evaluate the condition of existing boric acid leaks. However, the effort failed to identify and evaluate multiple existing boric acid leaks on safety-related components, including some that had deteriorated since initial discovery. The licensee entered this deficiency into their corrective action program as Condition Report CR-WF3-2007-3951.

This finding was more than minor because, if left uncorrected, it would have become a more significant safety concern. Specifically, some unchecked boric acid leaks may have worsened and corroded safety-related equipment. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the finding had very low risk significance because it was a qualification deficiency confirmed not to result in loss-of-operability in accordance with NRC Manual Chapter Part 9900, Technical Guidance, "Operability Determination Process for Operability and Functional Assessments." This finding had a crosscutting aspect in the Human Performance area, Work Practices component, because engineers failed to implement proper error prevention techniques when identifying boric acid leaks for additional review [H.4(a)] (Section 1R04).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to implement adequate corrective actions for a deficient emergency diesel generator fuel tank filling procedure (a condition adverse to quality). The licensee had identified the deficiency following a previous event when fuel oil leaked out of multiple fuel oil injectors during a diesel run. Procedural steps were needed to adequately vent the fill line following pressurization during fuel oil tank filling. However, the licensee only corrected the procedure in one section and, when a different section was used, the problem reoccurred. The fuel oil leak led to the emergency diesel generator being declared inoperable. In addition, the fuel oil created a potential fire hazard. The licensee entered this deficiency into their corrective action program as Condition Report CR-WF3-2008-1345.

The finding was more than minor because it was similar to nonminor example 4.f in Inspection Manual Chapter 0612, "Examples of Minor Issues," in that emergency diesel generator operability was affected. Further, the oil created a fire hazard. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low safety significance because it did not: (1) represent a loss of safety function; (2) represent an actual loss of a single train of equipment for more than its Technical Specification allowed outage time; or (3) screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event (Section 1R19).

- Green. The inspectors documented a self-revealing noncited violation of Technical Specification 6.8.1.c (Procedures) for the failure to correctly position a valve during a surveillance. The procedure required operators to position the essential Chiller AB return Header B isolation Valve CHW-786B closed but operators left the valve in the open position. This resulted in cross connecting the essential services chilled water Loops A and B, which led to an unplanned entry into Technical Specifications 3.7.12 and 3.0.3. The violation was revealed through a control room alarm. The licensee entered this deficiency into their corrective action program as Condition Report CR-WF3-2008-0778.

The finding was more than minor because, if left uncorrected, would have become a more significant safety concern. Specifically, with both loops of the essential services chilled water system cross connected, the system was no longer single-failure proof. A leak in one of the essential chilled water loops would have caused both units to become inoperable. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low safety significance because it was a qualification deficiency confirmed not to result in loss-of-operability in accordance with NRC Manual Chapter Part 9900, Technical Guidance, "Operability Determination Process for Operability and Functional Assessments." This finding had a crosscutting aspect in the Human Performance area, Work Practices component, because operators failed to implement self-checking techniques when performing procedure steps [H.4(a)] (Section 1R22).

- Green. The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to correct a condition adverse to quality (inadequate instructions that led to low fuel oil and the failure of auxiliary component cooling water pump bearing). Specifically, the licensee's corrective action for a previous event called for an operator aid (oil level label). However, the operator aid contained incorrect and confusing information. Consequently, another auxiliary component cooling water pump failed. The licensee entered this deficiency into their corrective action program as Condition Report CR-WF3-2008-0350.

The finding was more than minor because it was similar to nonminor violation example 4.f in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues," in that the problem affected auxiliary component cooling water Pump B operability. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low

safety significance because it did not: (1) represent a loss of safety function; (2) represent an actual loss of a single train of equipment for more than its Technical Specification allowed outage time; or (3) screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding had crosscutting aspects associated with Human Performance area, resources program component, because the licensee failed to have correct labeling on components [H.2.(c)] (Section 40A2).

B. Licensee-Identified Violations

No violations of significance were identified.

REPORT DETAILS

Summary of Plant Status: The plant began the inspection period on January 1, 2008, at 100 percent power and remained at approximately 100 percent power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness

1R01 Adverse Weather Protection (71111.01)

.1 Site Specific

a. Inspection Scope

The inspectors completed a review of the licensee's readiness for seasonal susceptibilities involving tornados and other high wind conditions. The inspectors: (1) reviewed plant procedures, the Final Safety Analysis Report, and Technical Specifications to ensure that operator actions defined in adverse weather procedures maintained the readiness of essential systems; (2) walked down portions of four systems (Dry Cooling Towers A and B, transformer yard, and external fire protection equipment enclosures) to ensure that adverse weather protection features were sufficient to support operability, including the ability to perform safe shutdown functions; (3) evaluated operator staffing levels to ensure the licensee could maintain the readiness of essential systems required by plant procedures; and (4) reviewed the corrective action program to determine if the licensee identified and corrected problems related to adverse weather conditions.

- February 21, 2008: Preparations for High Winds and Thunderstorms.

Documents reviewed by the inspectors included:

- OP-100-014, Revision 302, "Technical Specification and Technical Requirements Compliance"
- License Amendment 168 and Safety Evaluation Report to License Amendment 168, September 7, 2000
- EC-C99-008, Revision 1, "Tornado Missile Analysis"

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

.2 External Flooding

a. Inspection Scope

The inspectors: (1) reviewed the Final Safety Analysis Report, the flooding analysis, and plant procedures to assess seasonal susceptibilities involving external flooding; (2) reviewed the corrective action program to determine if the licensee identified and corrected flooding problems; (3) verified that operator actions for coping with flooding can reasonably achieve the desired outcomes; and (4) walked down the one below listed area to verify the adequacy of: (a) equipment seals located below the floodline, (b) floor and wall penetration seals, (c) watertight door seals, (d) common drain lines and sumps, (e) sump pumps, level alarms, and control circuits, and (f) temporary or removable flood barriers.

- March 19, 2008: Area near flood Doors 12 and 27.

Documents reviewed by the inspectors included:

- OP-901-521, "Severe Weather and Flooding," Revision 4
- MM-006-106, "Plant Door Maintenance," Revision 303

The inspectors completed one sample.

1R04 Equipment Alignment

.3 Partial Walkdown (71111.04)

a. Inspection Scope

The inspectors: (1) walked down portions of the three below listed risk important systems while the other train was out of service and reviewed plant procedures and documents to verify that critical portions of the selected systems were correctly aligned; (2) reviewed outstanding work requests; and (3) verified that the licensee was identifying and correcting deficiencies through their corrective action program.

- February 21, 2008: Shield Building Ventilation Train A
- February 27, 2008: High Pressure Safety Injection System Train A
- March 10, 2008: Emergency Diesel Generator (EDG) System Train B

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

Introduction. The inspectors identified a Green violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to implement corrective actions for a condition adverse to quality. Specifically, the licensee developed a corrective action to evaluate the condition of existing boric acid leaks. However, the effort failed to identify and evaluate multiple existing boric acid leaks on safety-related components, including some that had deteriorated since initial discovery.

Description. On February 27, 2008, the NRC inspectors identified significant boric acid accumulation on high-pressure safety injection Pump A (SI-MPMP0002A) and safety injection Valve SI-MVAAA120A. Both components showed signs of corrosion caused by the boric acid leaks. In addition, the high-pressure safety injection pump leak was active. The inspectors noted that each component had a work order/work request tag - indicating that the boric acid leaks were identified and that work requests and work orders were generated. The tags had dates of 2003 and 2004. These two components were originally evaluated through the boric acid program but were dispositioned as inactive leaks. In the program, the leaks were closed to the associated work orders and no additional monitoring was performed.

The inspectors identified that the licensee failed to implement a corrective action to re-evaluate and prioritize existing boric acid leaks. Specifically, Condition Report (CR)-2007-3379 had identified a weakness in evaluating previously identified boric acid leaks, especially when the leak was initially classified as inactive. This weakness was a condition adverse to quality because uncontrolled boric acid leakage can adversely affect safety-related component operability. Corrective Action 19, which had been completed and closed on January 16, 2008, called for the evaluation of existing boric acid leaks to re-prioritize them. The inspectors found that the high-pressure safety injection pump and safety injection valve, as well as a number of other components, had been inadvertently overlooked and were not re-evaluated. Therefore, the licensee had failed to take prompt corrective measures to address a condition adverse to quality. The inspectors also determined that the licensee had failed to properly check all existing boric acid leaks prior to closing the CR-2007-3379 action. In response to this finding, the licensee determined that the condition had not yet affected the operability or functionality of plant equipment.

Analysis. The failure to promptly correct a condition adverse to quality was a performance deficiency. This finding was more than minor because, if left uncorrected, it would have become a more significant safety concern. Specifically, some unchecked boric acid leaks may have worsened and corroded safety-related equipment. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the finding had very low risk significance because it was a qualification deficiency confirmed not to result in loss-of-operability in accordance with NRC Manual Chapter Part 9900, Technical Guidance, "Operability Determination Process for Operability and Functional Assessments." This finding had a crosscutting aspect in the Human Performance area, Work Practices component, because engineers failed to implement proper error prevention techniques when identifying boric acid leaks for additional review [H.4(a)].

Enforcement. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. In response to the finding that some boric acid leaks were not properly controlled via the existing boric acid program (a condition adverse to quality), Corrective Action 19 of CR-WF3-2007-3379 stated, in part, to: "Evaluate existing (Boric Acid) leaks using the prioritization process developed . . . and re-prioritize them accordingly." Contrary to the above, the licensee failed to correct a condition adverse to quality, in that the licensee failed to evaluate and prioritize all existing boric acid leaks, including high-pressure safety injection pump and safety injection Valve SI-MVAAA120A. Because this finding was of very low safety significance and has been entered into the licensee's corrective action program as CR-WF3-2007-3951, this

violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000382/2008002-01, Failure to Re-Evaluate Previously Identified Boric Acid Leaks).

.4 Semi-Annual Complete System Walkdown (71111.04S)

c. Inspection Scope

The inspectors: (1) reviewed plant procedures, drawings, the Final Safety Analysis Report, Technical Specifications, and vendor manuals to determine the correct alignment of the auxiliary component cooling water (ACCW) system Train B; (2) reviewed outstanding design issues, operator workarounds, and open work requests to verify that outstanding issues did not adversely affect the functionality of the system; and (3) verified that the licensee was identifying and resolving equipment problems in accordance with corrective action program requirements.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

d. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Quarterly Inspection (71111.05Q)

a. Inspection Scope

The inspectors walked down the four below listed plant areas to assess the material condition of active and passive fire protection features and their operational lineup and readiness. The inspectors: (1) verified that transient combustibles and hot work activities were controlled in accordance with plant procedures; (2) observed the condition of fire detection devices to verify they remained functional; (3) observed fire suppression systems to verify they remained functional and that access to manual actuators was unobstructed; (4) verified that fire extinguishers and hose stations were provided at their designated locations and that they were in a satisfactory condition; (5) verified that passive fire protection features (electrical raceway barriers, fire doors, fire dampers, steel fire proofing, penetration seals, and oil collection systems) were established for degraded or inoperable fire protection features and that the compensatory measures were commensurate with the significance of the deficiency; and (7) reviewed the Final Safety Analysis report to determine if the licensee identified and corrected fire protection problems.

- January 11, 2008: Fire Zones RAB37, 38, and 39
- January 28, 2008: Fire Zones RAB 8A, 8B, and 8C
- February 13, 2008: Fire Zones RAB 5, 6, and CTB
- February 24, 2008: Fire Zones RAB 1A, 1B, 1C, and 1D

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed four samples.

b. Findings

No findings of significance were identified.

.2 Annual Fire Protection Drill Observation (71111.05A)

a. Inspection Scope

On February 12, 2008, the inspectors observed a fire brigade drill to evaluate the readiness of licensee personnel to prevent and fight fires, including the following aspects: (1) the number of personnel assigned to the fire brigade, (2) use of protective clothing, (3) use of breathing apparatuses, (4) use of fire procedures and declarations of emergency action levels, (5) command of the fire brigade, (6) implementation of prefire strategies and briefs, (7) access routes to the fire and the timeliness of the fire brigade response, (8) establishment of communications, (9) effectiveness of radio communications, (10) placement and use of fire hoses, (11) entry into the fire area, (12) use of fire fighting equipment, (13) searches for fire victims and fire propagation, (14) smoke removal, (15) use of prefire plans, (16) adherence to the drill scenario, (17) performance of the postdrill critique, and (18) restoration from the fire drill. The licensee simulated a fire in emergency diesel generator (EDG) Room A.

Documents reviewed by the inspectors included:

- NTP-202, "Fire Protection Training," Revision 11
- RAB 16-001, "Emergency Diesel Generator 3A Pre-Fire Strategy," Revision 5

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

.3 Resident Inspector Quarterly Review (71111.11Q)

a. Inspection Scope

On March 10, 2008, the inspectors observed training of senior reactor operators and reactor operators to identify deficiencies and discrepancies in the training, to assess operator performance, and to assess the evaluator's critique. The training scenario involved several instrument failures, an instrument air leak which led to a preemptive reactor trip, two stuck out rods requiring an emergency boration, a loss of Train A electrical power, and a reactor coolant system leak requiring safety injection and containment isolation initiation.

Documents reviewed by the inspectors included:

- Emergency Operating Procedure OP-902-000, "Standard Post Trip Actions," Revision 10
- Emergency Operating Procedure OP-901-511, "Instrument Air Malfunction," Revision 7
- Emergency Planning Procedure EP-001-001, "Recognition and Classification of Emergency Conditions," Revision 21
- Simulator Scenario E-117

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

.1 Routine Quarterly Evaluations (71111.12Q)

a. Inspection Scope

The inspectors reviewed the equipment performance issue listed below to: (1) verify the appropriate handling of structure, system, and component performance or condition problems; (2) verify the appropriate handling of degraded structure, system, and component functional performance; (3) evaluate the role of work practices and common cause problems; and (4) evaluate the handling of structure, system, and component issues reviewed under the requirements of the Maintenance Rule, 10 CFR Part 50 Appendix B, and the Technical Specifications.

- Dry cooling tower radiation monitor line clogging
- Dry cooling tower motor control center breaker material condition

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed two samples.

b. Findings

No findings of significance were identified.

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

Risk Assessments and Management of Risk

a. Inspection Scope

The inspectors reviewed the four below listed assessment activities to verify: (1) performance of risk assessments when required by 10 CFR 50.65(a)(4) and

licensee procedures prior to changes in plant configuration for maintenance activities and plant operations; (2) the accuracy, adequacy, and completeness of the information considered in the risk assessment; (3) that the licensee recognized, and/or enters as applicable, the appropriate licensee-established risk category according to the risk assessment results and licensee procedures; (4) the licensee properly controlled emergent work; and (5) the licensee identified and corrected problems related to maintenance risk assessments.

- January 10, 2008: Plant protection system / engineered safety features actuation system initiation circuit power supply replacement
- February 27, 2008: High pressure safety injection Train B planned maintenance outage
- March 11, 2008: EDG Train A outage for corrective maintenance
- March 31, 2008: Excore nuclear instrumentation Channel C functional surveillance with Channel D inoperable

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed four samples.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors: (1) reviewed plant status documents, such as operator shift logs, emergent work documentation, deferred modifications, and standing orders, to determine if an operability evaluation was warranted for degraded components; (2) referred to the Final Safety Analysis Report and design-basis documents to review the technical adequacy of licensee operability evaluations; (3) evaluated compensatory measures associated with operability evaluations; (4) determined degraded component impact on any Technical Specifications; (5) used the significance determination process to evaluate the risk significance of degraded or inoperable equipment; and (6) verified that the licensee has identified and implemented appropriate corrective actions associated with degraded components.

- January 24, 2008: EDG B R4 injector pump drain line leak

- March 4, 2008: Chilled water system valve misalignment (cross connect Valve CHW-786B)
- March 17, 2008: EDG B control air emergency mode Solenoid 20FO1 failure

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

c. Inspection Scope

The inspectors selected the four below listed postmaintenance test activities of risk significant systems or components. For each item, the inspectors: (1) reviewed the applicable licensing basis and/or design-basis documents to determine the safety functions; (2) evaluated the safety functions that may have been affected by the maintenance activity; and (3) reviewed the test procedure to ensure it adequately tested the safety function that may have been affected. The inspectors either witnessed or reviewed test data to verify that acceptance criteria were met, plant impacts were evaluated, test equipment was calibrated, procedures were followed, jumpers were properly controlled, the test data results were complete and accurate, the test equipment was removed, the system was properly realigned, and deficiencies during testing were documented.

- January 7, 2008: Plant protection system / engineered safety features actuation system initiation circuit power supply replacement
- January 31, 2008: ACCW Pump B in-board and out-board bearing replacement
- February 6, 2008: EDG B fuel oil back leakage cleanup and repair
- March 13, 2008: EDG A control air relay replacement

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed four samples.

d. Findings

Introduction. The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to implement adequate corrective actions for a deficient EDG fuel tank filling procedure (a condition adverse to quality). The licensee had identified the deficiency following a previous event when fuel oil leaked out of multiple fuel oil injectors during a diesel run. Procedural steps were

needed to adequately vent the fill line following pressurization that occurred during fuel oil tank filling. However, the licensee only corrected the procedure in one section and, when a different section was used the problem reoccurred. The fuel oil leak led to the EDG being declared inoperable. In addition, the fuel oil created a potential fire hazard.

Description. On September 2, 2005, with both EDGs A and B running, a fuel oil leak was discovered from multiple fuel oil injectors on EDG B. The licensee determined that Procedure OP-003-009, "Fuel Oil Receipt and Transfer," Revision 11, Section 8.2 was inadequate, in that it provided ambiguous direction for relieving pressure in the fuel oil storage tank (FOST) fill line. If operators failed to properly vent the line following fuel delivery, fuel oil would leak past the fuel injectors. When this occurred, operators declared the EDG inoperable until the problem was understood and corrected. In addition, the leaking fuel oil increased the probability of a fire on the EDG.

CR-WF3-2005-3830, Corrective Action 9 directed the licensee's staff to improve the draining and venting guidance in Procedure OP-003-009, Section 8.2. Step 8.2.18 was clarified by changing the following:

"Throttle open fuel oil storage tank A(B) fill totalizer bypass, EGF-103A(B), to relieve any pressure that may be trapped in the fuel oil storage tank fill line."

to read,

"Open fuel oil storage tank A(B) fill totalizer bypass, EGF-103A(B), for **approximately five minutes**, to relieve any pressure that may be trapped in the fuel oil storage tank fill line."

This clarification was designed to eliminate the ambiguity of the word "throttle" and to allow time for the fill line to adequately vent.

The inspectors noted that the licensee had failed to change all relevant procedure sections that may lead to the same problem. For example, Procedure OP-003-009, Section 6.1, provided direction for EDG fuel oil receipt with the EDG secured (versus running). It still contained the same instruction as the unrevised Step 8.2.18, which did not reflect the lesson learned.

On January 2, 2008, a 24-hour EDG B surveillance run was conducted. During the run, EDG B FOST was filled twice, utilizing Procedure OP-003-009, Section 8.2, and once more following the completed run on January 3, utilizing Section 6.1 (the unchanged section).

On January 28, 2008, during the performance of the monthly EDG surveillance, a fuel oil leak was discovered by the auxiliary operator on the Fuel Injector 4R for EDG B. The shift manager, with input from the EDG system engineer, conservatively decided to secure EDG B and declare it inoperable. Technical Specifications 3.3.8.1.b and .d were entered. The subsequent apparent cause evaluation identified the most likely cause of the oil leak to be "inadequate venting of the FOST fill line post filling." This was the same cause identified as that identified following the September 2, 2005, event.

Despite the similarities between the events, the licensee determined that the corrective measures for the September 2, 2005, event were appropriate. The licensee indicated

that operators had only observed the leaking fuel oil injectors following fill evolutions that occurred when the EDG was operating. Therefore, they only changed Section 8.2 of the fill procedure.

The inspectors disagreed with the licensee's conclusions. The inspectors determined that the licensee's extent of condition review for the September 2, 2005, fuel oil leak was narrowly focused on one set of conditions (EDG running) and failed to identify where the same scenario could occur when implementing a different procedure section (filling when the EDG was secured). The licensee had no technical justification for the exclusion of Procedure Section 6.1 from the corrective action scope, the problem just hadn't occurred when implementing that procedure section yet. The resident added value by identifying that the licensee had implemented inadequate corrective measures following the 2005 event.

Analysis. The failure to correct a condition adverse to quality was a performance deficiency. The finding was more than minor because it was similar to nonminor example 4.f in Inspection Manual Chapter 0612, "Examples of Minor Issues," in that EDG operability was affected. Further, the fuel oil created a fire hazard. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low safety significance because it did not: (1) represent a loss of safety function; (2) represent an actual loss of a single train of equipment for more than its Technical Specification allowed outage time; or (3) screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Enforcement. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. The licensee had previously identified a condition adverse to quality associated with an inadequate EDG FOST procedure. Contrary to the above, the licensee did not satisfactorily correct the procedure. The licensee corrected one section but did not change the same faulty steps in a second location. The inadequate corrective action led to declaring an EDG inoperable on January 2, 2008. Because this violation was of very low safety significance and was entered into the corrective action program as CR-WF3-2008-1345, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000382/2008002-02, Failure to Correct "Fuel Oil Receipt and Transfer" Procedure).

1R22 Surveillance Testing (71111.22)

.1 Routine Surveillance Testing

a. Inspection Scope

The inspectors reviewed the Final Safety Analysis Report, procedure requirements, and Technical Specifications to ensure that the five below listed surveillance activities demonstrated that the structures, systems, and components tested were capable of performing their intended safety functions. The inspectors either witnessed or reviewed test data to verify that the following significant surveillance test attributes were adequate: (1) preconditioning; (2) evaluation of testing impact on the plant; (3) acceptance criteria; (4) test equipment; (5) procedures; (6) jumper/lifted lead controls; (7) test data; (8) testing frequency and method demonstrated Technical

Specification operability; (9) test equipment removal; (10) restoration of plant systems; (11) fulfillment of ASME Code requirements; (12) updating of performance indicator data; (13) engineering evaluations, root causes, and bases for returning tested structures, systems, and components not meeting the test acceptance criteria were correct; (14) reference setting data; and (15) annunciators and alarms setpoints. The inspectors also verified that the licensee identified and implemented any needed corrective actions associated with the surveillance testing.

- January 23, 2008: Surveillance Procedure OP-903-043, "Shield Building Ventilation System Operability Check," Revision 9, performance of Section 7.3, Shield Building Ventilation Train B Operability Check and Valve Test
- January 30, 2008: Surveillance Procedure OP-903-024, "Reactor Coolant System Water Inventory Balance," Revision 17
- January 30, 2008: Surveillance Procedure STA-001-001, "Containment Air Lock Door Seal Leakage Test," Revision 4
- February 26, 2008: System Operating Procedure OP-009-002, "Emergency Diesel Generator," Revision 302
- February 27, 2008, Surveillance Procedure OP-903-117, "Primary Auxiliaries Quarterly Inservice Valve Tests," Revision 13

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed five samples.

b. Findings

Introduction. The inspectors documented a Green self-revealing noncited violation of Technical Specification 6.8.1.c (Procedures) for the failure to correctly position a valve during a surveillance. The procedure required operators to position the essential Chiller AB return Header B isolation Valve CHW-786B closed but operators left the valve in the open position. This resulted in cross connecting the essential services chilled water Loops A and B, which led to an unplanned entry into Technical Specifications 3.7.12 and 3.0.3. The violation was revealed through a control room alarm. The licensee entered this deficiency into their corrective action program.

Description. On Sunday, March 2, 2008, the control room received the alarm "CHILLER A EXPANSION TANK LVL HI/LO." Based on this alarm, plant operators checked the plant computer and noted a change in the chilled water system's expansion tank levels. The licensee then performed equipment walkdowns in an effort to troubleshoot the cause. Valve CHW-786B was found in the open position. The normal operating position for this valve was closed. The licensee noted that with this valve open, both essential services chilled water system trains were cross-connected. At 5 p.m., the licensee declared both essential services chilled water system trains inoperable and entered Technical Specifications 3.7.12 and 3.0.3. At 5:17 p.m., the licensee was able to return Valve CHW-786B to the closed position, thus returning the essential services chilled water system trains to operable status. At this time the licensee exited both Technical Specifications. Upon further review, the licensee determined that the system remained

operable with the cross-connect valve open, but the system was not single-failure proof. A leak in one section of the chilled water system could have rendered both trains inoperable.

The licensee found that Valve CHW-786B had been manipulated on February 27, 2008, during the performance of Procedure OP-903-118, "Primary Auxiliaries Quarterly IST Valve Tests." The licensee found that operations personnel involved in this test activity failed to follow Procedure OP-903-118, Section 7.3.5.8, and return the valve in question to the closed position following the test. In addition, the operators responsible for verifying that the valve had been placed back to the closed position failed to note that the valve was still open.

Analysis. The failure to follow the procedural requirements was a performance deficiency. The finding was more than minor because, if left uncorrected, would have become a more significant safety concern. Specifically, with both loops of the essential services chilled water system cross connected, the system was no longer single-failure proof. A leak in one of the essential chilled water loops would have caused both units to become inoperable. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low safety significance because it was a qualification deficiency confirmed not to result in loss-of-operability in accordance with NRC Manual Chapter Part 9900, Technical Guidance, "Operability Determination Process for Operability and Functional Assessments." This finding had a crosscutting aspect in the Human Performance area, Work Practices component, because operators failed to implement self-checking techniques when performing procedure steps [H.4(a)].

Enforcement. Technical Specification 6.8.1.c requires that the licensee correctly implement procedures for test activities of safety-related equipment. Procedure OP-903-118, "Primary Auxiliaries Quarterly Inservice Valve Tests," Section 7.3.5.8, Revision 13, specifies that essential Chiller AB return Header B Isolation Valve CHW-786B be closed and locked at the conclusion of the test. Contrary to the above, on February 27, 2008, licensee personnel failed to place Valve CHW-786B in the closed position following completion of the test. Because this finding was of very low safety significance and has been entered into the licensee's corrective action program as CR-WF3 2008-0778, this violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000382/2008002-03, Essential Chiller AB Return Header B Isolation Valve CHW-786B Misposition).

1EP6 Drill Evaluation (71114.06)

.1 Emergency Preparedness Drill Observation

a. Inspection Scope

For the one drill listed below evolution contributing to Drill/Exercise Performance and Emergency Response Organization Performance Indicators, the inspectors: (1) observed the training evolution to identify any weaknesses and deficiencies in classification, notification, and Protective Action Requirements development activities; (2) compared the identified weaknesses and deficiencies against licensee-identified findings to determine whether the licensee is properly identifying failures; and (3) determined whether licensee performance is in accordance with the

guidance of the NEI 99-02, "Voluntary Submission of Performance Indicator Data," Revision 5 acceptance criteria.

- March 5, 2008: The drill involved multiple equipment failures, including failure of a containment spray pump and an atmospheric dump valve. In addition, the drill included a reactor coolant system cold leg pipe rupture and a subsequent reactor trip. This resulted in degrading conditions that necessitated the declaration of an Alert for a pressure boundary leakage greater than 10 gpm, followed by a Site Area Emergency for loss of any two barriers (reactor coolant system and fuel cladding) and ultimately a General Emergency for loss of any two barriers and potential loss of the third barrier.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Cornerstone: Initiating Events

a. Inspection Scope

Inspectors sampled licensee submittals for the three performance indicators listed below for the period January through December 2007. The definitions and guidance of Nuclear Energy Institute 99-02, "Regulatory Assessment Indicator Guideline," Revision 5, were used to verify the licensee's basis for reporting each data element in order to verify the accuracy of performance indicator data reported during the assessment period. The inspectors reviewed licensee event reports, monthly operating reports, and operating logs as part of the assessment. Licensee performance indicator data were also reviewed against the requirements of Procedure EN-LI-114, "Performance Indicator Process," Revision 2.

- Unplanned Scrams Per 7,000 Critical Hours
- Unplanned Scrams With Loss Of Normal Heat Removal
- Unplanned Power Changes Per 7,000 Critical Hours

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

The inspectors performed a daily screening of items entered into the license's corrective action program. This assessment was accomplished by reviewing condition reports and event trend reports and attending daily operational meetings. The inspectors: (1) verified that equipment, human performance, and program issues were being identified by the licensee at an appropriate threshold and that the issues were entered into the corrective action program; (2) verified that corrective actions were commensurate with the significance of the issue; and (3) identified conditions that might warrant additional followup through other baseline inspection procedures.

b. Findings

No findings of significance were identified.

.2 Selected Issue Followup

a. Inspection Scope

In addition to the routine review, the inspectors selected the issue, listed below, for a more in-depth review. The inspectors considered the following during the review of the licensee's actions: (1) complete and accurate identification of the problem in a timely manner; (2) evaluation and disposition of operability/reportability issues; (3) consideration of extent of condition, generic implications, common cause, and previous occurrences; (4) classification and prioritization of the resolution of the problem; (5) identification of root and contributing causes of the problem; (6) identification of corrective actions; and (7) completion of corrective actions in a timely manner.

- January 30, 2008: ACCW Pump B Bearing Failures

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

Introduction. The inspectors identified a Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," because the licensee failed to correct a condition adverse to quality (inadequate instructions that led to low fuel oil and the failure of ACCW pump bearing). Specifically, the licensee's corrective action for a previous event called for an operator aid (oil level label). However, the operator aid contained incorrect and confusing information. Consequently, another ACCW pump failed.

Description. On January 30, 2008, ACCW Pump B was operated during postmaintenance testing. During the run, pump journal bearing temperatures were well above acceptable levels. Subsequent inspection revealed that both inboard and outboard pump journal bearings had failed. The apparent cause evaluation (CR-WF3-2008-00350) determined that low bearing oil level, as a result of an incorrect operator aid, caused the failure. The low level mark on the operator aid was 5/16 of an inch lower than the lowest oil level recommended by the pump vendor. This failure was not related to the maintenance (electrical work) that was just performed on the system, so it was not an in-process failure.

The inspectors identified that the licensee had failed to take adequate corrective measures for a prior failure of the Pump A, ACCW outboard bearing on January 24, 1990. Further, operators were living with an inadequate lube oil level instruction (label) and failed to get the label corrected. Specifically, the inspectors noted that the root cause for the 1990 event (Root Cause Investigation 90-002) was also low bearing oil level. For that event, the corrective actions directed engineers to determine appropriate oil levels for the ACCW pumps and then to create an operator aid that clearly displayed required oil levels during idle and operating conditions. However, as noted in the apparent cause for the more recent event, the operator aid (the oil level label) contained incorrect information. Therefore, operators could not use the label alone to determine the appropriate oil level. Instead of relying on the label, most operators knew where the appropriate oil level should be. However, when a fairly new operator (who was unfamiliar with the informal requirements) attempted to establish oil level on his own, he relied on past experience with another similar pump. That oil level was too low. The inspectors considered the licensee's corrective measures to address the earlier January 24, 1990 failure inadequate, in that the oil level label was ineffective at correcting the ambiguous guidance that caused the 1990 failure.

Analysis. The failure to provide an adequate oil level instruction (label) was a performance deficiency. The finding was more than minor because it was similar to nonminor violation example 4.f in Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues," in that the problem affected ACCW Pump B operability. This problem, if left uncorrected, would also become a more significant safety concern because the problem could recur when the site had a greater reliance on ACCW. Using the Manual Chapter 0609, "Significance Determination Process," Phase 1 Screening Worksheet, the issue screened as having very low safety significance because it did not: (1) represent a loss of safety function; (2) represent an actual loss of a single train of equipment for more than its Technical Specification allowed outage time; or (3) screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding had crosscutting aspects associated with Human Performance area, Resources Program component, because the licensee failed to have correct labeling on components [H.2.(c)].

Enforcement. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to assure that conditions adverse to quality are promptly identified and corrected. Contrary to the above, in 1990, the licensee had identified that instructions for maintaining oil level on the ACCW pump bearing reservoirs were inadequate (a condition adverse to quality) but failed to promptly correct the condition. Specifically, the licensee provided a confusing oil level label that led directly to a more recent failure to two ACCW pump bearings. Because this violation was of very low safety significance and was entered in the corrective action program as

CR-WF3-2008-0350, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000382/2008002-04, ACCW Pump Failure Due to Inaccurate Operator Aid).

4OA6 Management Meetings

Exit Meeting Summary

On April 9, 2008, the resident inspectors presented the quarterly inspection results to Mr. J. Kowalewski, General Manager, Entergy, and other members of licensee management at the conclusion of the inspection. 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.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

S. Anders, Superintendent, Plant Security
A. Buford, Engineer, System Engineering
K. Cook, Director, Nuclear Safety Assurance
A. Dodds, Manager, Operations
C. Fugate, Assistant Manager, Operations
R. Gilmore, Manager, Corrective Action and Assessments
K. Gordon, Assistant Manager, Operations
M. Groome, Senior Lead Engineer, System Engineering
J. Kowalewski, General Manager, Plant Operations
J. Lewis, Manager, Emergency Preparedness
B. Lindsey, Manager, Outage
P. Mckenna, Technical Specialist, System Engineering
R. Murillo, Manager, Licensing
K. Nichols, Director, Engineering
A. Pilutti, Manager, Radiation Protection
O. Pipkins, Senior Licensing Specialist, Licensing
B. Proctor, Manager, System Engineering
R. Putnam, Manager, Programs and Components
R. Redmond, Technical Specialist/BACCP
J. Ridgel, Manager, Quality Assurance
H. Thompson, Coordinator, Maintenance Projects
O. Tucker, Supervisor, System Engineering
K. Walsh, Vice President of Operations
R. Williams, Senior Licensing Specialist, Licensing
D. Viener, Supervisor, Engineering

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

05000382/2008002-01	NCV	Failure to Re-Evaluate Previously Identified Boric Acid Leaks (Section 1R04)
05000382/2008002-02	NCV	Failure to Correct "Fuel Oil Receipt and Transfer" Procedure (Section 1R19)
05000382/2008002-03	NCV	Essential Chiller AB Return Header B Isolation Valve CHW 786B Misposition (Section 1R22)
05000382/2008002-04	NCV	ACCW Pump Failure Due to Inaccurate Operator Aid (Section 4OA2)

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

Section 1R04: Equipment Alignment

Condition Reports

CR-WF3-2007-2028	CR-WF3-2007-2919	CR-WF3-2007-3379	CR-WF3-2007-3591
CR-WF3-2007-2866	CR-WF3-2007-3315	CR-WF3-2007-3448	CR-WF3-2008-0164

Procedures/Documents

NUMBER	TITLE	REVISION
OP-002-001	Auxiliary Component Cooling Water System	13
OP-008-008	Shield Building Ventilation	8
OP-903-043	Shield Building Ventilation System Operability Check	9
OP-009-008	Safety Injection System	20
OP-009-002	Emergency Diesel Generator	302
EN-DC-319	Inspection and Evaluation of Boric Acid Leaks	0, 1, 2 and 3
EN-MA-121	Fluid Leak Management Program	1
EN-WM-100	Work Request (WR) Generation, Screening and Classification	3
UNT-006-031	Identification and Evaluation of Boric Acid Leaks	1
NOECP-107	Boric Acid Corrosion Control Program (BACCP)	1
EN-LI-119	Apparent Cause Evaluation (ACE) Process	7
EN-LI-102	Corrective Action Process	12
Dwg G167 Sheets 1 and 2	Safety Injection System Flow Diagram	July 8, 1991

Work Orders

45410

25607

109130

Section 1R05: Fire Protection

Procedures/Documents

NUMBER	TITLE	REVISION
UNT-005-013	Fire Protection Program	9
OP-009-004	Fire Protection	11
MM-007-010	Fire Extinguisher Inspection and Replacement	15
FP-001-015	Fire Protection System Impairments	17
FP-001-017	Transient Combustibles	19
NTP-202	Fire Protection Training	11

Section 1R12: Maintenance Effectiveness

Condition Reports

CR-WF3-2000-1152	CR-WF3-2004-1336	CR-WF3-2005-1630	CR-WF3-2007-1998
CR-WF3-2003-1918	CR-WF3-2004-1443	CR-WF3-2005-2178	CR-WF3-2007-2304
CR-WF3-2003-2001	CR-WF3-2004-2131	CR-WF3-2005-3837	CR-WF3-2007-2429
CR-WF3-2003-2351	CR-WF3-2004-2512	CR-WF3-2006-4070	CR-WF3-2007-3180
CR-WF3-2003-3008	CR-WF3-2004-3479	CR-WF3-2007-0240	CR-WF3-2007-3521
CR-WF3-2003-3028	CR-WF3-2004-3690	CR-WF3-2007-0320	CR-WF3-2008-0145

Procedures/Documents

NUMBER	TITLE	REVISION
DC-121	Maintenance Rule	1
NUMARC 93-01	Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	3
W-SE-2005-001	Waterford 3 Maintenance Rule Periodic (a)(3) Assessment	0

Section 1R13: Maintenance Risk Assessments and Emergent Work Control

Condition Reports

CR-WF3-2005-0804	CR-WF3-2007-0695	CR-WF3-2007-1039	CR-WF3-2007-1518
CR-WF3-2008-0706			

Procedures/Documents

NUMBER	TITLE	REVISION
OI-037-000	Operations Risk Assessment Guideline	2
EN-WM-101	On-Line Work Management Process	1
B-289, Sheet 90	Power Distribution and Motor Data 480V MCC 3A315-S One Line Diagram	8
B-289, Sheet 91	Power Distribution and Motor Data 480V MCC 3A315-S One Line Diagram	10
B-289, Sheet 93	Power Distribution and Motor Data 480V MCC 3B315-S One Line Diagram	8
B-289, Sheet 94	Power Distribution and Motor Data 480V MCC 3B315-S One Line Diagram	9
OP-009-002	Emergency Diesel Generator	302
OP-009-008	Safety Injection System	20
MI-003-222	Matrix Response Time Verification for Reactor Protection System and Engineered Safety Features Actuation System Channels A, B, C and D	302

Section 1R15: Operability Evaluations

Condition Reports

CR-WF3-2008-0305 CR-WF3-2008-0706 CR-WF3-2008-0778

Procedures/Documents

NUMBER	TITLE	REVISION
EN-OP-104	Operability Evaluation	2
OP-009-002	Emergency Diesel Generator	302

Section 1R19: Postmaintenance Testing

Condition Reports

CR-WF3-2005-3830 CR-WF3-2008-0305 CR-WF3-2008-1345

Procedures/Documents

NUMBER	TITLE	REVISION
OP-003-009	Fuel Oil Receipt and Transfer	11
OP-003-009	Fuel Oil Receipt and Transfer	11 Change 3
OP-009-002	Emergency Diesel Generator	302
OP-903-068	Emergency Diesel Generator and Subgroup Relay Operability Verification	14 Change 2
MPR Associates, Inc. Rprt 1062-0803-0016-00a	Waterford 3 EDG B Diesel Fuel Oil Leakage Independent Technical Review	

Section 1R22: Surveillance Testing

Condition Reports

CR-WF3-2007-0075 CR-WF3-2007-0704 CR-WF3-2008-0537 CR-WF3-2008-0778

Procedures/Documents

NUMBER	TITLE	REVISION
OI-040-000	Reactor Coolant System Leakage Monitoring	
ECM94-004	RCS Inventory Balance Calculation	2
Entergy Letter CNRO-2007-0704	Inspection and Mitigation of Alloy 600/82/182	2
EN-HU-103	Human Performance Error Reviews	1
OP-903-118	Primary Auxiliaries Quarterly IST Valve Tests	13
Drwg G853 – Sheet 3	HVAC - Chilled Water Flow Diagram SH-1	December 4, 1975

Section 1EP6: Drill Evaluation

Condition Report

CR-WF3-2008-0907

Procedures/Documents

NUMBER	TITLE	REVISION
OP-902-000	Standard Post Rip Actions	10
OP-902-002	Loss of Coolant Accident Recovery Procedure	11
EP-001-001	Recognition and Classification of Emergency Conditions	21

Section 4OA1: Performance Indicator Verification (71151)

Performance Indicator Review Package 1st Quarter 2007
Performance Indicator Review Package 2nd Quarter 2007
Performance Indicator Review Package 3rd Quarter 2007
Performance Indicator Review Package 4th Quarter 2007

Section 4OA2: Problem Identification and Resolution

Condition Reports

CR-WF3-2008-0350 CR-WF3-2008-0421 CR-WF3-2008-1354

Procedures/Documents

NUMBER	TITLE	REVISION
EN-LI-102	Corrective Action Process	10
EN-LI-118	Root Cause Analysis Process	7
EN-LI-119	Apparent Cause Evaluation Process	7
WA-01079686	Engineering Analysis of ACCW bearing Low Lube Oil	
OI-004-000	Controlled Access Area Watchstation Logs	29
OP-002-001	Auxiliary Component Cooling Water	13
Engineering Request ER-W3-1998-0912-000	High Oil Level in the B ACCW Pump	
Engineering Request ER-W3-2000-0420-000	Add Operator Aid for ACCW Pump Maximum Oil Level	
RCI-90-002	Root Cause Investigation	

LIST OF ACRONYMS USED

ACCW	Auxiliary Component Cooling Water
EDG	Emergency Diesel Generator
FOST	Fuel Oil Storage Tank
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
NUMARC	Nuclear Management and Resources Council
SDP	Significance Determination Process