



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

August 3, 2007

Kevin Walsh  
Vice President Operations  
Waterford 3  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - NRC INTEGRATED  
INSPECTION REPORT 05000382/2007003

Dear Mr. Walsh:

On July 7, 2007, the NRC completed an inspection at your Waterford Steam Electric Station, Unit 3. The enclosed report documents the inspection findings, which were discussed on July 3, 2007, with Mr. Joe Kowalewski and other members of your staff.

This 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 no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if any, 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). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ GDRReplogle for

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

Docket: 50-382  
License: NPF-38

Enclosure: NRC Inspection Report 050000382/2007003  
w/Attachment: Supplemental Information

Entergy Operations, Inc.

-2-

cc w/Enclosure:

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

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

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

Mr. Joe Kowalewski  
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

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

Electronic distribution by RIV:  
 Regional Administrator (**BSM1**)  
 DRP Director (**ATH**)  
 DRS Director (**DDC**)  
 DRS Deputy Director (**RJC1**)  
 DRS Deputy Director (**WBJ**)  
 Senior Resident Inspector (**GFL1**)  
 Branch Chief, DRP/E (**JAC**)  
 Senior Project Engineer, DRP/E (**GDR**)  
 Team Leader, DRP/TSS (**CJP**)  
 RITS Coordinator (**MSH3**)

Only inspection reports to the following:

DRS STA (**DAP**)  
 M. Kunowski, OEDO RIV Coordinator (**MAK3**)  
 D. Pelton, OEDO RIV Coordinator (**DLP**)

**ROPreports**

WAT Site Secretary (**AHY**)

SUNSI Review Completed:   GDR   ADAMS:  Yes    No   Initials:   GDR    
 Publicly Available    Non-Publicly Available    Sensitive    Non-Sensitive

R:\ REACTORS\ WAT\2007\WT2007-03RP-GFL.wpd

RIV:RI:DRP/E	SRI:DRP/E	SPE:DRP/E	C:DRS/EB1	C:DRS/EB2
DHOverland;mjs	GFLarkin	GDRreplogle	DAPowers	LJSmith
<b>E-GDRreplogle</b>	<b>E-GDRreplogle</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>
7/28/07	7/23/07	8/2/07	8/3/07	8/3/07
C:DRS/OB	C:DRS/PSB	C:DRP/E		
ATGody	MPShannon	JAClark		
<b>DAPowers for</b>	<b>/RA/</b>	<b>GDRreplogle for</b>		
8/3/07	8/3/07	8/3/07		

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket No.: 50-382  
License No.: NPF-38  
Report No.: 05000382/2007003  
Licensee: Entergy Operations, Inc.  
Facility: Waterford Steam Electric Station, Unit 3  
Location: Hwy. 18  
Killona, Louisiana  
Dates: April 8 through July 7, 2007  
Inspectors: G. F. Larkin, Senior Resident Inspector  
D. H. Overland, Resident Inspector  
A. L. Fairbanks, Reactor Inspector  
Approved By: Jeff Clark, Chief, Project Branch E

## SUMMARY OF FINDINGS

IR05000382/2007-003; 04/08/2007 - 07/07/2007; Waterford Steam Electric Station, Unit 3.

The report covered a 3-month period of inspection by resident inspectors and a reactor inspector. The inspectors did not identify any significant findings. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

Summary of Plant Status: The plant began the inspection period on April 8, 2007, at 100 percent power and remained at approximately 100 percent for the remainder of the inspection period.

1. REACTOR SAFETY  
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

Readiness For Seasonal Susceptibilities

a. Inspection Scope

The inspectors completed a review of the licensee's readiness of seasonal susceptibilities to hurricane force winds and rainfall induced flooding. The inspectors: (1) reviewed plant procedures, the Updated 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 the three systems listed below to ensure that adverse weather protection features (missile barriers) 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.

- June 21, 2007: Dry Cooling Towers Sump Pumps
- June 21, 2007: Atmospheric Dump Valves
- June 21, 2007: Steam Generator Code Safeties

Documents reviewed by the inspectors included:

- OP-901-521, Revision 4, "Severe Weather and Flooding"
- UFSAR, Revision 15
- 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.

1R04 Equipment Alignment (71111.04)

Partial Walkdown

a. Inspection Scope

The inspectors: (1) walked down portions of the three below listed risk important systems, while the redundant train was out of service for maintenance, 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.

- May 21, 2007: Emergency diesel generating system Train A
- June 13, 2007: Low-pressure safety injection system Train A
- June 14, 2007: Essential chilled water system Train A

Documents reviewed by the inspectors included:

- OP-009-002, Revision 301, "Emergency Diesel Generator"
- TM-C629.0305, Vendor Technical Manual for Cooper Bessemer Emergency Diesel Generator
- OP-009-008, Revision 19, "Safety Injection System"
- OP-002-004, Revision 301, "Chilled Water System"

The inspectors completed three samples.

b. Findings

No Findings of significance were identified.

1R05 Fire Protection (71111.05)

Quarterly Inspection

a. Inspection Scope

The inspectors walked down the six plant areas listed below 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 that they remained functional; (3) observed

fire suppression systems to verify that 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 in a satisfactory material condition; (6) verified that adequate compensatory measures 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 corrective action program documents to verify that the licensee identified and corrected fire protection problems.

- May 7, 2007: Fire Zones RAB 17, 18, 19, 20, 21, and 23
- May 8, 2007: Fire Zones RAB 1E, 15, 16, 8A, 8B, and 8C
- May 9, 2007: Fire Zones RAB 7, 7A, 7B, 7C, 7D, and Cooling Tower B
- May 14, 2007: Fire Zones RAB 5, 6, 11, 12, 13, and Fuel Handling Building
- May 15, 2007: Fire Zones RAB 1B, 30, 31, 32, 33, and 35
- May 16, 2007: Fire Zones RAB 1A, 1C, 36, 37, 38, and 39

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed six samples.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

Semi-annual Internal Flooding

a. Inspection Scope

The inspectors: (1) reviewed the Updated Final Safety Analysis Report, the flooding analysis, and plant procedures to assess seasonal susceptibilities involving internal flooding; (2) reviewed the Updated Final Safety Analysis Report and corrective action program to determine if the licensee identified and corrected flooding problems; (3) inspected underground bunkers/manholes to verify the adequacy of (a) sump pumps, (b) level alarm circuits, (c) cable splices subject to submergence, and (d) drainage for bunkers/manholes; (4) verified that operator actions for coping with flooding can reasonably achieve the desired outcomes; and (5) walked down the two below listed areas 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.

- July 3, 2007: Engineered safeguards pump rooms Train A and B

Documents reviewed by the inspectors included:



- OP-500-002, Revision 7, "Control Room Cabinet B"
- LW3-809-79, "Magnetrol Instruction Manuals"
- WLP-PS-SP00, Revision 10, "Plant Sump System"
- SD-SP, Revision 10, "Sump Pump System Description"
- Work Order 50965592

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors reviewed licensee programs, verified performance against industry standards, and reviewed critical operating parameters and maintenance records for the emergency diesel generator Trains A and B intake air heaters, jacket water coolers, fuel oil coolers, and lube oil coolers. The inspectors verified that: (1) performance tests were satisfactorily conducted for heat exchangers/heat sinks and reviewed for problems or errors; (2) the licensee utilized the periodic maintenance method outlined in EPRI NP-7552, "Heat Exchanger Performance Monitoring Guidelines;" (3) the licensee properly utilized biofouling controls; (4) the licensee's heat exchanger inspections adequately assessed the state of cleanliness of their tubes, and (5) the heat exchanger was correctly categorized under the Maintenance Rule.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

Training Observation

a. Inspection Scope

On June 11, 2007, 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, a reactor coolant pump trip due to a seized shaft, a failure of the automatic reactor trip and manual reactor trip pushbuttons to function, and a steam generator tube rupture.

Documents reviewed by the inspectors included:

- Emergency Operating Procedure OP-902-000, Revision 10, "Standard Post Trip Actions"
- Emergency Operating Procedure OP-902-007, Revision 11, "Steam Generator Tube Rupture Recovery"
- Emergency Operating Procedure OP-901-120, Revision 301, "Pressurizer Pressure Control Malfunction"
- Emergency Operating Procedure OP-901-201, Revision 3, "Steam Generator Level Control System Malfunction"

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed the two equipment performance issues 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.

- Essential chiller cycle timer failures
- Broad range gas monitor spurious alarms

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)

a. Inspection Scope

The inspectors reviewed the five assessment activities listed below 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 recognizes, 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.

- May 2, 2007: Special test instruction to restore main generator air side seal oil configuration to normal system line up
- May 25, 2007: Planned turbine valve test
- May 31, 2007: Planned surveillance activities for undervoltage and shunt trip coil testing for reactor trip circuit breakers
- June 6, 2007: Planned steam bypass control valve test
- June 13, 2007: Scheduled maintenance outage for low-pressure safety injection system Train B and containment spray system Train B

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed five samples.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors: (1) reviewed plants 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 Updated 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.

- April 9, 2007: Operability evaluation addressing a missed reactor coolant system chemistry surveillance requirement 4.4.6.
- April 23, 2007: Operability evaluation addressing a through wall leak in an unisolable emergency feedwater line drain
- May 14, 2007: Operability evaluation addressing an air leak on a main feed isolation valve air accumulator
- July 4, 2007: Operability evaluation addressing emergency diesel generator Train A 125 Vdc ground

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed four samples.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

Annual Review

a. Inspection Scope

The inspectors reviewed key affected parameters associated with energy needs, materials/replacement components, timing, heat removal, control signals, equipment protection from hazards, operations, flowpaths, pressure boundary, ventilation boundary, structural, process medium properties, licensing basis, and failure modes for the modification listed below. The inspectors verified that: (1) modification preparation, staging, and implementation did not impair emergency/abnormal operating procedure actions, key safety functions, or operator response to loss of key safety functions; (2) postmodification testing maintained the plant in a safe configuration during testing by verifying that unintended system interactions will not occur, structure, system, and component performance characteristics still meet the design basis, the appropriateness of modification design assumptions, and the modification test acceptance criteria has been met; and (3) the licensee has identified and implemented appropriate corrective actions associated with permanent plant modifications.

- June 5, 2007: Increase of emergency diesel generator Trains A and B starting air receiver storage capacity to support the requirement for five consecutive starts per train

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the three 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. The inspectors also reviewed the Updated Final Safety Analysis Report to determine if the licensee-identified and corrected problems related to postmaintenance testing.

- June 5, 2007: Planned maintenance for main feedwater isolation valve Train A
- June 11, 2007: Stroke time test of containment vacuum relief Valve CVR-101 following preventative maintenance on the supply breaker
- June 13, 2007: Planned maintenance for low-pressure safety injection header to reactor coolant Loop 1B flow control valve

Documents reviewed by the inspectors included:

- OP-903-121, Revision 8, "Safety Systems Quarterly IST Valve Tests"
- OP-903-120, Revision 7, "Containment and Miscellaneous Systems Quarterly IST Valve Tests"
- Work Orders 111001-06 and 51041174

The inspectors completed three samples.

b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing (71111.22)

### a. Inspection Scope

The inspectors reviewed the Updated 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.

- April 9, 2007: Chemistry Procedure CE-002-006, Revision 13, Change 2, "Maintaining Reactor Coolant Chemistry," is used to sample the reactor coolant system for various isotopes, including Xenon-133.
- May 10, 2007: Surveillance Procedure OP-903-121, Revision 8, "Safety Systems Quarterly IST Valve Test," verified that control and isolation emergency feedwater valves stroked within an acceptable time limit and that remote position indication for each of the valves was accurate.
- May 20, 2007: Surveillance Procedure OP-903-116, Revision 10, "Train B Integrated Emergency Diesel Generator/Engineering Safety Features Test," verified that the emergency diesel generator Train B lockout features functioned as expected.
- June 13, 2007: Surveillance Procedure MM-007-033, Revision 301, "IST Safety and Relief Valve Bench Testing and Maintenance," verified that the shutdown heat exchanger Train B component cooling water outlet relief valve functioned correctly.
- June 13, 2007: Surveillance Procedure OP-903-030, Revision 15, "Safety Injection Pump Operability Verification," verified that low-pressure safety injection pump Train B functioned correctly.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed five samples.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the Updated Final Safety Analysis Report, plant drawings, procedure requirements, and Technical Specifications to ensure that the below listed temporary modification was properly implemented. The inspectors: (1) verified that the modification did not have an affect on system operability/availability; (2) verified that the installation was consistent with modification documents; (3) ensured that the postinstallation test results were satisfactory and that the impact of the temporary modification on permanently installed structures, systems, and components were supported by the test; (4) verified that the modification was identified on control room drawings and that appropriate identification tags were placed on the affected drawings; and (5) verified that appropriate safety evaluations were completed. The inspectors verified that licensee identified and implemented any needed corrective actions associated with temporary modification.

- June 19, 2007: Increase of volume of motive air to provide additional operability margin for main feedwater isolation Valve A due to known air leakage from solenoid valves

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 (OA)

4OA1 Performance Indicator Verification (71151)

Cornerstone: Mitigating Systems

The inspectors sampled licensee submittals for the three mitigating system performance index indicators listed below for the period of January 2006 through June 2007. The definitions and guidance of Nuclear Energy Institute 99-02, "Regulatory Assessment Indicator Guideline," Revision 4, 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, out-of-service logs, operating logs, and the Maintenance Rule database 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.

- High Pressure Safety Injection Index
- Auxiliary Feedwater System Index
- Residual Heat Removal System Index

#### 4OA2 Identification and Resolution of Problems (71152)

##### .1 Routine Review of Identification and Resolution of Problems

###### a. Inspection Scope

The inspectors performed a daily screening of items entered into the licensee'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 Follow-up Inspection

###### 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.

- June 21, 2007: Component cooling water system leakage

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

###### b. Findings

No findings of significance were identified.



.3 Semiannual Trend Review

a. Inspection Scope

The inspectors completed a semiannual trend review of repetitive or closely related issues associated with the cleanliness and material condition of the wet and dry cooling towers that were documented in condition reports, system and component health reports, quality assurance audits, trend reports, the licensee's internal performance indicators, and NRC inspection reports to identify trends that might indicate the existence of more safety significant issues. The inspectors' review consisted of the 6-month period of January 1 to July 7, 2007. When warranted, some of the samples expanded beyond those dates to fully assess the issue. The inspectors also reviewed corrective action program items associated with troubleshooting. The inspectors compared and contrasted their results with the results contained in the licensee's quarterly trend reports. Corrective actions associated with a sample of the issues identified in the licensee's trend report were reviewed for adequacy.

Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

On July 3, 2007, the resident inspectors presented the inspection results to Mr. Joe Kowalewski 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.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee Personnel**

S. Anders, Superintendent, Plant Security  
K. Cook, Director, Nuclear Safety Assurance  
A. Dodds, Manager, Operations  
G. Fey, Manager, Planning and Scheduling  
J. Kowalewski, General Manager, Plant Operations  
R. Murillo, Senior Staff Engineer, Licensing  
K. Nichols, Director, Engineering  
A. Pilutti, Manager, Radiation Protection  
R. Putnam, Manager, Programs and Components  
G. Scott, Licensing Engineer  
K. T. Walsh, Vice President, Operations

## ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

## LIST OF DOCUMENTS REVIEWED

### **Section 1R05: Fire Protection (71111.05)**

Procedure

NUMBER	TITLE	REVISION
Administrative Procedure UNT-005-013	Fire Protection Program	9
Operating Procedure 009-004	Fire Protection	11-8
Maintenance Procedure MM-007-010	Fire Extinguisher Inspection and Extinguisher Replacement	13
Administrative Procedure UNT-005-013	Fire Protection Program	9
Fire Protection Procedure FP-001-015	Fire Protection System Impairments	17
Fire Protection Procedure FP-001-017	Transient Combustibles	19
Training Manual Procedure NTP-202	Fire Protection Training	11-4

### **Section 1R07: Heat Sink Performance (71111.07)**

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
EPRI NP-7552	Heat Exchanger Performance Monitoring Guidelines	

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
PE-001-015	Administrative Procedure - Generic Letter 89-13 Heat Exchanger Test Basis	3
STP-01174749	EDG Heat Exchangers Performance Test	0
PE-001-014	Administrative Procedure - Heat Exchanger Performance Monitoring Program	2
PE-004-037	Administrative Procedure - Heat Exchanger Performance Analysis	0
W3-DBD-002	Emergency Diesel Generator and Automatic Load Sequencer Design Basis Document	3
GL-89-13	Service Water System Problems Affecting Safety-Related Equipment	
SD-EDG	Emergency Diesel Generator System Description	9

Condition Reports

CR-WF3-1998-01585

**Section 1R12: Maintenance Effectiveness (71111.12)**

Routine Maintenance Effectiveness Inspection

Procedures

NUMBER	TITLE	REVISION
DC-121	Maintenance Rule	1
NUMARC 93-01	Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	3

Miscellaneous Documents

Engineering Report W-SE-2005-001	Waterford 3 Maintenance Rule Periodic (a)(3) Assessment	0
-------------------------------------	---	---

Condition Reports

CR-WF3-2006-0733	CR-WF3-2007-0178	CR-WF3-2007-1096
CR-WF3-2006-0861	CR-WF3-2007-0244	CR-WF3-2007-1489
CR-WF3-2006-1054	CR-WF3-2007-0258	CR-WF3-2007-1664
CR-WF3-2006-1124	CR-WF3-2007-0270	CR-WF3-2007-1680
CR-WF3-2006-1728	CR-WF3-2007-0571	CR-WF3-2007-1964
CR-WF3-2006-2965	CR-WF3-2007-0668	CR-WF3-2007-2052
CR-WF3-2006-3400	CR-WF3-2007-0932	CR-WF3-2007-2177
CR-WF3-2006-3524	CR-WF3-2007-1029	CR-WF3-2007-2306
CR-WF3-2007-0177		

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

Procedures:

NUMBER	TITLE	REVISION
OP-903-127	Reactor Trip Circuit Breaker Post Maintenance Test	3
OP-903-007	Turbine Inlet Valve Cycling Test	13
OP-005-004	Main Steam	13
OI-037-000	Operations Risk Assessment Guideline	2
EN-WM-101	On-Line Work Management Process	1

Drawings

NUMBER	TITLE	REVISION
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
1564-318	Seal Oil	15

**Section 1R15: Operability Evaluations (71111.15)**

Procedures:

NUMBER	TITLE	REVISION
EN-OP-104	Operability Evaluation	1
OP-035-000	Notification Matrix	6

Condition Reports

CR-WF3-2007-1246  
CR-WF3-2007-1456

CR-WF3-2007-1766  
CR-WF3-2007-2430

**Section 1R17: Permanent Plant Modifications (71111.17)**

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
ER-W3-2006-0254-000	EDG Starting Air Capacity Upgrade	0
EN-DC-141	Design Inputs	2
EN-LI-100	Process Applicability Information	4
EN-LI-101	10 CFR 50.59 Review Program	2
DRN-07-212	Add New EDG Starting Air Tie-In ANC Accumulator Piping	0

**Section 1R22: Surveillance Testing (71111.22)**

Procedure

NUMBER	TITLE	REVISION
CE-002-006	Maintaining Reactor Coolant Chemistry	13
OP-903-121	Safety Systems Quarterly IST Valve Tests	8
OP-903-116	Train B Integrated Emergency Diesel Generator/Engineering Safety Features Test	10
MM-007-033	IST Safety and Relief Valve Bench Testing and Maintenance	301
OP-903-030	Safety Injection Pump Operability Verification	15

Work Orders

51088821, 51085069, 51056040, 99241

**Section 1R23: Temporary Plant Modifications (71111.23)**

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
EN-DC-136	Temporary Modifications	1
EC-1277	Temporary Modification to Install Temporary Air Bottle to FW-184A	1
EN-DC-134	Design Verification	0
EN-LI-100	Process Applicability Information	4

Work Orders

111076

**Section 4OA2: Identification and Resolution of Problems (71152)**

Procedures/Documents

NUMBER	TITLE	REVISIONS
EN-LI-113	Licensing Basis Document Change Process	1
EN-LI-102	Corrective Action Process	7
OP-002-003	Component Cooling Water System	301
OP-002-001	Auxiliary Component Cooling Water	300
EN-LI-110	Commitment Management Program	0
OP-100-014	Technical Specification and Technical Requirements Compliance	301
EC-M99-010	Dry Cooling Tower Basin Ponding Analysis	0
ECP-97-024	Pipe Stress Calculation: Dry Cooling Tower Circulating Water Piping	0

Condition Reports

CR-WF3-2005-0487	CR-WF3-2005-4705	CR-WF3-2006-1026
CR-WF3-2005-0837	CR-WF3-2005-4783	CR-WF3-2006-1464
CR-WF3-2005-3687	CR-WF3-2005-4999	CR-WF3-2006-1597
CR-WF3-2005-4148	CR-WF3-2006-0687	CR-WF3-2006-1806

CR-WF3-2006-2246  
CR-WF3-2006-2434  
CR-WF3-2006-3481  
CR-WF3-2007-0513  
CR-WF3-2007-0705  
CR-WF3-2007-0918  
CR-WF3-2007-0974

CR-WF3-2007-1976  
CR-WF3-2007-1998  
CR-WF3-2007-2029  
CR-WF3-2007-2030  
CR-WF3-2007-2034  
CR-WF3-2007-2054

CR-WF3-2007-2164  
CR-WF3-2007-2168  
CR-WF3-2007-2206  
CR-WF3-2007-2304  
CR-WF3-2007-2367  
CR-WF3-2007-2451