



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

November 16, 2006

Joseph E. Venable
Vice President Operations
Waterford 3
Entergy Operations, Inc.
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Killona, LA 70066-0751

**SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - NRC INTEGRATED
INSPECTION REPORT 05000382/2006004**

Dear Mr. Venable:

On October 7, 2006, the NRC completed an inspection at your Waterford Steam Electric Station, Unit 3. The enclosed report documents the inspection findings, which were discussed on October 17, 2006, with you 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.

The report documents two self-revealing findings of very low safety significance (Green). These findings were determined to involve violations of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these violations as noncited violations (NCVs), consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest any NCV in this report, 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 copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector 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, 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

Entergy Operations, Inc.

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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/

Zachary K. Dunham, Chief
Project Branch E
Division of Reactor Projects

Docket: 50-382
License: NPF-38

Enclosure:

1. NRC Inspection Report 050000382/2006004
w/Attachment: Supplemental Information

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SRI:DRP/E	C:DRS/EB1	C:DRS/PSB-HP	C:DRS/EB2	C:DRS/OB
GFLarkin	JAClark	DAPowers	LJSmith	RLNease
/RA/	/RA/	/RA/	/RA/	/RA/
11/16/06	11/9/06	11/9/06	11/7/06	11/8/06
C:DRP/E				
ZKDunham				
/RA/				
11/16/06				

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 50-382

License: NPF-38

Report: 05000382/2006004

Licensee: Entergy Operations, Inc.

Facility: Waterford Steam Electric Station, Unit 3

Location: Hwy. 18
Killona, Louisiana

Dates: July 8 through October 7, 2006

Inspectors: G. Larkin, Senior Resident Inspector
D. Overland, Resident Inspector
B. Henderson, Reactor Inspector, Engineering Branch 1
R. Kopriva, Senior Reactor Inspector, Engineering Branch 1
C. Paulk, Senior Reactor Inspector, Engineering Branch 1
P. Goldberg, PE, Reactor Inspector, Engineering Branch 2
P. Elkmann, Emergency Preparedness Inspector, Operations
Branch

Other: M. Baquera, Engineering Associate

Approved By: Zachary K. Dunham, Chief, Branch E, Division of Reactor
Projects

ATTACHMENT: Supplemental Information

Enclosure

SUMMARY OF FINDINGS

IR 05000382/2006-004; 07/08/2006 - 10/07/2006; Waterford Steam Electric Station, Unit 3; Postmaintenance Testing

The report covered a 3-month period of inspection by resident inspectors, regional reactor inspectors, and a regional emergency preparedness Inspector. Two self-revealing Green findings, both of which were noncited violations, were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "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 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. A self-revealing noncited violation of Technical Specification 6.8.1.a was identified for an inadequate procedure that resulted in the unintentional actuation of five engineered safety features actuation system Train B relays and the loss of a 480 Vac motor control center. The 480 Vac motor control center provided power to the Train B pressurizer heaters and to the control element assembly motor generator Set B. Loss of the control element assembly motor generator increased the likelihood of a reactor trip.

This finding is greater than minor because it affects the Initiating Event cornerstone objective procedure quality attribute to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. This finding was evaluated using the significance determination process and was determined to be of very low safety significance (Green) because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a crosscutting aspect in the area of human performance associated with resources because the licensee failed to ensure that Work Order 26998 was adequate for the task. (Section 1R19)

Cornerstone: Mitigating Systems

- Green. A self-revealing noncited violation of Technical Specification 6.8.1.a was identified for failing to follow a maintenance procedure during performance of eddy current testing on the safety-related essential chiller Train A condenser tubing. The performance deficiency was the failure to perform a full length eddy current inspection of each tube with an appropriately sized eddy current probe. Subsequently, essential chiller Train A was removed from service to correct a throughwall tube leak in its condenser.

This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone because the performance deficiency affected the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, "Significance Determination Process," Appendix A, Phase 1, questions for mitigating systems, the inspectors determined that this finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, there was no loss of a safety function, and there were no other adverse impacts to the facility. This finding had a crosscutting aspect in the area of human performance associated with work practices because the licensee failed to effectively communicate expectations of procedure compliance. (Section 1R19)

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status: The plant began the period on July 8, 2006, at 100 percent reactor power. On August 17, 2006, the plant operators manually reduced reactor power to 95 percent to support main condenser C1 waterbox cleaning. The plant returned to 100 percent power on August 19, 2006. Power remained at that level the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R02 Evaluations of Changes, Tests, or Experiments (71111.02)

a. Inspection Scope

The inspectors reviewed the effectiveness of the licensee's implementation of changes to the facility structures, systems, and components; risk-significant normal and emergency operating procedures; test programs; and the Updated Final Safety Analysis report in accordance with 10 CFR 50.59, "Changes, Tests, and Experiments." The inspectors utilized Inspection Procedure 71111.02 for this inspection.

The inspectors reviewed 8 evaluations performed by the licensee since the last NRC inspection of this area at the Waterford, Unit 3, facility. The evaluations were reviewed to verify that licensee personnel had appropriately considered the conditions under which the licensee may make changes to the facility or procedures or conduct tests or experiments without prior NRC approval. The inspectors reviewed 17 licensee-performed applicability determinations and screenings in which licensee personnel determined that neither screenings nor evaluations were required, to ensure that the exclusion of a full evaluation was consistent with the requirements of 10 CFR 50.59. Procedures, evaluations, screenings, and applicability determinations reviewed are listed in the attachment to this report.

The inspectors reviewed and evaluated a sample of recent licensee condition reports to determine whether the licensee had identified problems related to implementation of the program to meet the requirements of 10 CFR 50.59, entered them into the corrective action program, and resolved technical concerns and regulatory requirements.

The inspection procedure specifies inspector-review of a required minimum sample of 5 licensee safety evaluations and 10 applicability determinations and screenings (combined). The inspectors completed review of 8 licensee safety evaluations and 17 applicability determinations and screenings (combined).

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

.1 Partial Walkdown

a. Inspection Scope

The inspectors: (1) walked down portions of the three below listed risk important systems and reviewed plant procedures and documents to verify that critical portions of the selected systems were correctly aligned; and (2) compared deficiencies identified during the walk down to the licensee's Updated Final Safety Analysis Report and corrective action program to ensure problems were being identified and corrected.

- July 12, 2006; Switchgear Air Handling Unit Train A
- July 17, 2006; Emergency Diesel Generator Train A
- August 29, 2006; Emergency Feedwater System Train A

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed three samples.

b. Findings

No Findings of significance were identified.

.2 Complete Walkdown (71111.04s)

a. Inspection Scope

The inspectors: (1) reviewed plant procedures, drawings, the Updated Final Safety Analysis Report, Technical Specifications, and vendor manuals to determine the correct alignment of containment spray System A; (2) reviewed outstanding design issues, operator work arounds, and Updated Final Safety Analysis Report documents to determine if open issues affected the functionality of the system; and (3) verified that the licensee was identifying and resolving equipment alignment problems. Documents reviewed by the inspectors are listed in the attachment.

The inspectors completed one sample.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Quarterly Inspection

a. Inspection Scope

The inspectors walked down the five 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 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 the Updated Final Safety Analysis Report to determine if the licensee identified and corrected fire protection problems.

- July 24, 2006; Fire Zones RAB 2, 18, 19 and 20
- August 15, 2006; Fire Zones RAB 2, 15, 17, 19, 33, 35 and 36
- August 24, 2006; Fire Zones RAB 3A, 8B, 8C, 30, and Cooling Tower B
- September 3, 2006; Fire Zones RAB 1A, 2, 16, 33, 37, 39, and Cooling Tower A
- September 27, 2006; Fire Zones RAB 8A, 8C, 1A, 1C, and 3A

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed five samples.

b. Findings

No findings of significance were identified.

1R07 Biennial Heat Sink Performance (71111.07B)

.1 Performance of Testing, Maintenance, and Inspection Activities

a. Inspection Scope

The inspectors selected three heat exchangers that were either directly or indirectly connected to the safety-related service water system. The inspectors reviewed the licensee's test and cleaning methodology for the following heat exchangers:

- Component cooling water heat exchanger
- Essential chillers
- Auxiliary component cooling water heat exchangers

In addition, the inspectors reviewed test data for the heat exchangers and design and vendor-supplied information to ensure that the heat exchangers were performing within their design bases. The inspectors also reviewed chemical controls to avoid fouling, and heat exchanger inspection and test results. Specifically, the inspectors verified proper extrapolation of test conditions to design conditions, appropriate use of test instrumentation, and appropriate accounting for instrument inaccuracies. Additionally, the inspectors verified that the licensee appropriately trended these inspection and test results, assessed the causes of the trends, and took necessary actions for any step changes in these trends. The inspectors reviewed the methods and results of heat exchanger inspection and cleaning and verified that the methods used to test, inspect and clean were consistent with industry standards and as found results were appropriately dispositioned, such that, the final conditions were acceptable.

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed three samples.

b. Findings

No findings of significance were identified.

.2 Verification of Conditions and Operations Consistent with Design Bases

a. Inspection Scope

For the selected heat exchangers, the inspectors verified that the licensee established heat sink and heat exchanger condition, operation, and test criteria were consistent with the design assumptions. Specifically, the inspectors reviewed the applicable calculations to ensure that the thermal performance test acceptance criteria for the heat exchangers were being applied consistently throughout the calculations. The inspectors also verified that the appropriate acceptance values for fouling and tube plugging for the component cooling water heat exchangers remained consistent with the values used in the design-basis calculations. Finally, the inspectors verified that the parameters measured during the thermal performance tests for the component cooling water heat exchangers were consistent with those assumed in the design bases.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors verified that the licensee had entered significant heat exchanger/heat sink performance problems into the corrective action program. The inspectors reviewed 17 condition reports. Documents reviewed by the inspectors are listed in the attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program(71111.11)

a. Inspection Scope

On August 15, 2006, the inspectors observed testing and 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 first training scenario involved multiple instrumentation failures, reactor coolant pump seal failure, loss of condenser vacuum, and steam generator tube rupture with failure of a low-pressure safety injection pump to autostart. The second training scenario also involved multiple instrumentation failures, a loss of feedwater control, a loss-of-coolant accident, and a manual initiation of safety injection actuation signal.

Documents reviewed by the inspectors included:

- Simulator Scenario Number E-100 list of events and event objectives
- Simulator Scenario Number E-103 list of events and event objectives
- Operations Procedure OP-902-000, "Standard Post Trip Actions," Revision 10
- Operations Procedure OP-902-001, "Reactor Trip Recovery Procedure," Revision 10
- Emergency Planning Procedure EP-001-001, "Recognition and Classification of Emergency Conditions," Revision 20
- Simulator comments for all operator positions

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 below listed maintenance activities 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.

- Main Steam System
- Instrument Air System

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)

.1 Risk Assessment and Management of Risk

a. Inspection Scope

The inspectors reviewed the assessment activity 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; and (4) the licensee identified and corrected problems related to maintenance risk assessments.

- July 18, 2006: Planned maintenance activities on emergency feed water Train B

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed one sample.

b. Findings

No findings of significance were identified.

.2 Emergent Work Control

a. Inspection Scope

The inspectors: (1) verified that the licensee performed actions to minimize the probability of initiating events and maintained the functional capability of mitigating systems and barrier integrity systems; (2) verified that emergent work-related activities such as troubleshooting, work planning/scheduling, establishing plant conditions, aligning equipment, tagging, temporary modifications, and equipment restoration did not place the plant in an unacceptable configuration; and (3) reviewed the Updated Final Safety Analysis Report to determine if the licensee identified and corrected risk assessment and emergent work control problems.

- August 7, 2006: During emergent work activities on core element assembly Calculator 2 and the plant monitoring computer
- September 27, 2006: During emergent work activities on main feedwater isolation Valve 1

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed two 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.

- July 24, 2006; Engineering evaluation addressing operability of the emergency fuel oil storage tank mechanical level instrumentation for Technical Specification level monitoring activities Engineering Report 2006-0208
- August 1, 2006; Operability evaluation addressing core protection calculator Channel B response to a lightning strike as described in Condition Report 2006-2204

- September 6, 2006; Operability evaluation addressing time response testing of the reactor coolant system resistance temperature device as described in Condition Report 2006-2560

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed three samples.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17B)

a. Inspection Scope

The inspectors reviewed eight permanent plant modification packages and associated documentation, such as implementation reviews, safety evaluation applicability determinations, screenings, and evaluations, to verify that they were performed in accordance with regulatory requirements and plant procedures. The inspectors also reviewed the procedures governing plant modifications to evaluate the effectiveness of the program for implementing modifications to risk-significant systems, structures, and components, such that these changes did not adversely affect the design and licensing basis of the facility. Procedures and permanent plant modifications reviewed are listed in the attachment to this report. Further, the inspectors interviewed certain of the cognizant design and system engineers for the identified modifications as to their understanding of the modification packages and process.

The inspectors evaluated the effectiveness of the licensee's corrective action process to identify and correct problems concerning the performance of permanent plant modifications by reviewing a sample of related CRs. The reviewed CRs are identified in the attachment to this report.

The inspection procedure specifies inspector-review of a required minimum sample of five permanent plant modifications. The inspectors completed review of eight permanent plant modifications.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors selected the five 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.

- July 13, 2006: Planned maintenance for shield building ventilation SBV B
- July 18, 2006: Planned maintenance emergency feedwater Pump EFW B
- August 1, 2006: Planned maintenance for fuel handling building heating and ventilation Valve HVF-201A
- August 9, 2006: Emergent maintenance to repair tube leak in essential Chiller A condenser
- September 7, 2006: Planned maintenance to replace Train B ESFAS Relay K110B

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed five samples.

b. Findings

Eddy Current Testing

Introduction. A self-revealing NCV of Technical Specification (TS) 6.8.1.a was identified for failing to follow a maintenance procedure during performance of eddy current testing on the safety-related essential chiller Train A condenser tubing. The performance deficiency was the failure to perform a full length eddy current inspection of each tube with an appropriately sized eddy current probe. Subsequently, essential chiller Train A was removed from service to correct a throughwall tube leak in its condenser.

Description. In February 2006, the essential chiller Train A condenser was inspected using eddy current technology per Procedure CEP-NDE-0862, "Eddy Current Examination of Non-Ferrous Tubing in Safety Related Components," Revision 5. Procedure CEP-NDE-0862 required that the eddy current bobbin coil probe have a fill factor greater than or equal to 80 percent and to scan the full length of each tube scheduled for examination. The fill factor is a measure of how full the bobbin coil fills the tube's inside diameter. The 80 percent fill factor is an essential variable that affects the quality of eddy current data. The essential chiller condenser tubing does not have a constant inside diameter. For the majority of the tube length, where a mechanical process has formed a cooling fin on the tube's outside diameter, the fill factor was approximately 80 percent. However, as the tube passed through the tube support plate area where the tube diameter increases, the probe's fill factor was approximately 59 percent. Consequently, a full length scan of the tubes with a fill factor greater than or

equal to 80 percent per Procedure CEP-NEP-0862 could not be accomplished. The inspectors noted the following during their review of the issue:

- The technicians were aware that the fill factor was unacceptable to adequately examine tubes in the tube support plate area. Data collected in this area was disregarded since the fill factor of the bobbin coil did not meet the test requirements. The eddy current technician believed only a “best effort” exam was required for the condenser tube inspection because the testing was an exploratory test to support equipment reliability.
- The technicians noted a partial throughwall flaw in one tube in the tube support plate area. Although the flaw size met the test acceptance criteria, the test as it was performed was not adequate to accurately assess the flaw size.
- Engineering personnel were not aware of the fill factor test limitations and believed that a 100 percent inspection of the condenser tubes was performed.

Entergy Procedure EN-LI-102, “Corrective Action Process,” specifies that a deviation from prescribed processing or inspection affecting a safety-related structure, system, or component is an adverse condition. Adverse conditions are required to be documented in the corrective action program. Entergy Procedure EN-MA-101, “Conduct of Maintenance,” stated that, if a procedure cannot be performed as written, the user shall immediately stop work, place work in a safe condition, discontinue use of the procedure, and initiate a condition report, if appropriate. Because the technicians understood that a “best effort” exam met expectations, the technicians did not write a condition report or annotate the test results to document that an indeterminate condition existed in the tube support plate region of the condenser tubes. Therefore, no additional inspection or testing was done, even though a partial flaw had been noted by the technicians. Subsequently, in August 2006, Entergy declared essential chiller Train A inoperable due to freon leaks. Most of the leaked freon migrated into the component cooling water system that cooled the condenser. Entergy vented the component cooling water system to remove freon. Entergy later inspected the essential chiller condenser and discovered a throughwall leak due to tube wall wastage on the tube, which had been previously noted by the technicians to have a partial flaw.

Analysis. The performance deficiency was the failure to follow Procedures CEP-NDE-0862, "Eddy Current Examination of Non-Ferrous Tubing in Safety Related Components;" EN-LI-102, “Corrective Action Process;” and EN-MA-101, “Conduct of Maintenance,” during the performance of eddy current testing on essential chiller Train A. This resulted in failing to perform a full length eddy current inspection of each tube with an appropriately sized eddy current probe, and stopping work to initiate a condition report. This performance deficiency resulted in the inability to detect significant tube wall thinning that later caused a throughwall tube leak in essential chiller condenser Train A. This condition caused a reduction in reliability and availability of essential chiller Train A. This finding is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone because the performance deficiency affected the reliability and capability of systems that respond to initiating events to prevent undesirable consequences. Using IMC 0609, “Significance Determination Process,” Appendix A, Phase 1, questions for mitigating systems, the

inspectors determined that this finding was of very low safety significance (Green) because the finding was not a design or qualification deficiency, there was no loss of a safety function, and there were no other adverse impacts to the facility. This finding had a crosscutting aspect in the area of human performance associated with work practices because the licensee failed to effectively communicate expectations of procedure compliance. A “best effort” exam did not ensure procedure compliance nor was the noncompliance documented in the corrective action program.

Enforcement. Technical Specification Section 6.8.1.a requires that written procedures shall be established, implemented, and maintained covering applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Appendix A, recommends that maintenance that can affect the performance of safety-related equipment be performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances. Contrary to these requirements, in February 2006, Entergy failed to ensure that the requirements of Procedure CEP-NDE-0862, "Eddy Current Examination of Non-Ferrous Tubing in Safety Related Components," to perform a full length eddy current inspection of each tube with an appropriately sized eddy current probe were followed. Subsequently, essential chiller Train A was removed from service to correct a throughwall tube leak in its condenser. This violation was entered into the licensee's corrective action program as Condition Report CR-ECH-2006-0366. Because this finding was of very low risk and was entered into the licensee's corrective action program, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000382/2006004-01, Inadequate Inspection of Essential Chiller Condenser Tubing).

Engineered Safety Features Actuation System Train B Relays

Introduction. A self-revealing noncited violation of TS 6.8.1.a was identified for an inadequate procedure that resulted in the unintentional actuation of five engineered safety features actuation system Train B relays and the loss of a 480 Vac motor control center. The 480 Vac motor control center provided power to the Train B pressurizer heaters and to the control element assembly (CEA) motor generator Set B. Loss of the CEA motor generator increased the likelihood of a reactor trip.

Description. On September 7, 2006, the licensee performed routine maintenance to replace ESFAS Relay K110B, "LPSI pump B, HPSI pump B and AB Safety Injection Actuation System (SIAS) Actuation Relay," per Work Order 26998. While lifting the neutral side coil lead for Relay K110B, there was an unintentional actuation of five Train B ESFAS relays. The maintenance technicians had lifted the power feed to Relay K110B without installing a jumper to maintain power to the other five associated ESFAS relays. This resulted in an unanticipated loss of a 480 Vac motor control center that provided power to the Train B pressurizer heaters and to the CEA motor generator set Train B. There are two CEA motor generator sets that provide power to the control element drive mechanisms (CEDM). Loss of both CEA motor generator sets would result in the insertion of all CEAs into the reactor core and a reactor trip. Loss of one CEA motor generator reduced the number of redundant power supplies to the CEDM and increased the likelihood of a reactor trip. There are two trains of pressurizer heaters. Loss of both trains of pressurizer heaters would result in the potential loss of

reactor coolant system pressure control, loss of reactor coolant pump net positive suction head, and reduction of reactor coolant system subcooling margin. The root cause for the inadvertent actuation of the Train B ESFAS relays was an inadequate work instruction. Specifically, the work instruction did not provide work steps to install the jumper required to maintain power to the other ESFAS relays. The work process planning standard did not specify the level of detail required to control jumper installation within work packages. The licensee also determined that a contributing cause to the event was a lack of questioning attitude by the technician performing the tasks who did not fully understand the configuration of the relay terminations. The licensee's corrective actions include: (1) clarifying expectations for the level of detail required in work instructions and procedures when lifting leads or installing jumpers in energized circuits; and (2) reinforcing the importance of knowing the purpose of any lead lifts prior to lifting the leads and to stop work if any uncertainty arises.

Analysis. The performance deficiency was the failure of the licensee's maintenance procedure to provide adequate instructions to prevent inadvertent actuation of the ESFAS relays. This finding is greater than minor because it affects the procedure quality attribute of the Initiating Event cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. This finding was evaluated using IMC 0609, "Significance Determination Process," Appendix A, and was determined to be of very low safety significance (Green) because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. This finding had a crosscutting aspect in the area of human performance associated with resources because the licensee failed to ensure that Work Order 26998 was adequate for the task.

Enforcement. Technical Specification Section 6.8.1.a requires that written procedures shall be established, implemented, and maintained covering applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Appendix A, recommends that maintenance that can affect the performance of safety-related equipment be performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances. Contrary to these requirements, on September 7, 2006, Entergy failed to ensure that Work Order 26998 was adequate for the task. As a result, an inadvertent actuation of the Train B ESFAS relays and deenergization of Bus 32 B occurred. This violation was entered into the licensee's corrective action program as Condition Report CR-WF3-2006-02567. Because this finding was of very low risk and was entered into the licensee's corrective action program, this violation is being treated as an NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 0500382/2006004-02; Inadequate Maintenance Procedure for ESFAS Relay Replacement).

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 four 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.

- July 17, 2006: Operations Procedure OP-903-068, "Emergency Diesel Generator," Revision 19. This monthly test verified operability of Emergency Diesel Generator B to satisfy Technical Specification requirements.
- August 29, 2006: Operations Procedure OP-903-121, "Safety Systems Quarterly IST Valve Tests," Revision 7. This surveillance verified that the stroke time on EFW-223A was acceptable.
- September 25, 2006: Operations Procedure OP-903-050, "Component Cooling Water and Auxiliary Component Cooling Water Pump and Valve Operability Test," Revision 17. This surveillance verified operability of component cooling water Pump A.
- August 16, 2006: Operations Procedure OP-002-004, "Restoration Valve Line Up for Essential Chiller A From A/B," Revision 12. This surveillance verified the capability of essential Chiller A.

Documents reviewed by the inspectors are listed in the attachment. The inspectors completed four samples.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspector performed an in-office review of Revision 32, Change 1, to the Waterford Unit 3 Emergency Plan, received June 27, 2006. This revision

- Changed the location of the licensee's emergency news center,

- Deleted the alternate emergency news center briefing area,
- Removed references to one emergency operations facility communication line,
- Relocated the description of the information technology representative,
- Deleted the offsite public relations representative and relocated the position's duties,
- Deleted the media response assistant and relocated the position's duties,
- Deleted the rumor control supervisor positions and relocated the position's duties, and
- Changed the titles of several emergency response organization positions.

The revision was compared to its previous revision, to the criteria of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, and to the standards in 10 CFR 50.47(b) to determine if the revision was adequately conducted following the requirements of 10 CFR 50.54(q). This review was not documented in a safety evaluation report and did not constitute approval of licensee changes, therefore these revisions are subject to future inspection.

The inspector completed one sample during the inspection.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

For the two below listed drills and simulator-based training evolutions contributing to Drill/Exercise Performance (DEP) and Emergency Response Organization (ERO) Performance Indicators, the inspectors: (1) observed the training evolution to identify any weaknesses and deficiencies in classification, notification, and Protective Action Requirements (PAR) 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," acceptance criteria.

- July 10, 2006: The simulator based drill involving multiple equipment failures including failure of a pressurizer pressure instrument, reactor coolant hot leg temperature element, loss of instrument air and anticipated transient without scram, resulting in a site area emergency due to reactor coolant system leakage greater than available charging pump capacity.

- July 27, 2006: The site drill involved a tornado strike in the protected area, a reactor coolant system lost of coolant accident, fuel failure and containment failure resulting in a general emergency due to failure of any two barriers and loss or potential loss of a third barrier.

Documents reviewed by the inspectors included:

- Simulator Scenario Number E-117 list of events and event objectives
- Operations Procedure OP-902-000, "Standard Post Trip Actions," Revision 10
- Operations Procedure OP-902-002, "Loss of Coolant Accident Recovery Procedure," Revision 11
- Emergency Planning Procedure EP-001-001, "Recognition and Classification of Emergency Conditions," Revision 20
- Operations Procedure OP-901-511, "Instrument Air Malfunction," Revision 5
- Operations Procedure OP-901-120, "Pressurizer Pressure Control Malfunction," Revision 2

The inspectors completed one simulator based and one site drill sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

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 attending corrective action review and work control 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.

.2 Selected Issue Followup 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.

- August 17, 2006: Component Cooling Water

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 17, 2006, the inspectors presented the safety evaluation and permanent plant modifications inspection results to Mr. J. Venable, Vice President, and other members of the staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

On August 7, 2006, the inspector conducted a telephonic exit meeting to present the Emergency Action Level and Emergency Plan Changes inspection results to Mr. M. Huskey, Acting Manager, Emergency Preparedness, who acknowledged the findings. The inspector confirmed that proprietary information was not provided or examined during the inspection.

On August 17, 2006, the inspectors presented the biennial heat sink performance inspection results to Mr. J. Venable, Vice President, and other members of licensee management. Licensee management acknowledged the inspection findings. The inspectors confirmed that proprietary information was not reviewed.

The resident inspectors presented the inspection results to Mr. J. Venable, Vice President and other members of licensee management at the conclusion of the inspection on October 17, 2006. 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.

4OA7 Licensee Identified Violations

None.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

S. Anders, Superintendent, Plant Security
J. Burke, Quality Assurance Supervisor
K. Cook, Director, Nuclear Safety Assurance
R. Fletcher, Training Manager, EOI
P. Fresneda, Component Engineering
C. Fugate, Assistant Manager, Operations (Shift)
R. Peters, Director, Planning and Scheduling
J. Holman, Manager, Nuclear Engineering
M. Huskey, Acting Manager, Emergency Preparedness
B. Lanka, Manager, Design Engineering
D. Marse, Chemical Specialist/EOI
P. McKenna, System Engineering, NSSS
R. Murillo, Manager, Licensing
C. Pickering, Code Programs
G. Pierce, Technical Assistant
B. Pilutti, Manager, Radiation Protection
O. Pipkins, Senior Licensing Engineer
R. Putnam, Manager, Engineering Programs
J. Ridgel, Manager, Corrective Actions
G. Scott, Licensing Engineer
R. Stewart, Heat Exchanger Engineer
J. Venable, Vice President, Operations
K. Walsh, General Manager, Plant Operations
B. Williams, Director, Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000382/2006004-01	NCV	Inadequate Inspection of Essential Chiller Condenser Tubing (Section 1R19)
05000382/2006004-02	NCV	Inadequate Maintenance Procedure for ESFAS Relay Replacement (Section 1R19)

LIST OF DOCUMENTS REVIEWED

1R02 Evaluations, Tests, or Experiments (71111.02)

Applicability Determinations

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION(S) / CHANGE(S)</u>
	Electrical Procedures 50.59 Exemption Review	0/0
CE-002-030	Maintaining Diesel Fuel Oil	10/0
ME-003-230	Battery Service Test	15/1, 15/2
MI-005-358	Calibration of Flowmeters	0/0
MM-4-004	Miscellaneous Hoist PM	0
NE-002-002	Variable T-avg Test	12
NOECP-317	Setpoint Changes	3/0
PE-4-037	Heat Exchanger Performance Analysis	0
PE-4-037	Heat Exchanger Performance Analysis	0
RF-1-08	Reactor Head Stud	2/1

Condition Reports

CR-WF3-2005-03762
 CR-WF3-2006-00814
 CR-WF3-2006-01617
 CR-WF3-2006-02008
 CR-WF3-2006-02022

Evaluations

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION / DATE</u>
02-001	MNSA-2 Alternate Weld Repair	0

Evaluations

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION / DATE</u>
03-001	Low Pressure Safety Injection Containment Isolation Valve Bypass Line Removal	0
03-010	Boric Acid Makeup Tank	3
03-043	ER-W3-2003-0135-000 - Addition of Spacers to Incore Nuclear Instrumentation Thimbles	November 14, 2003
04-003	Control Room Tracer Gas Test	0
05-007	Pressurizer Preventative Repair, ER-2004-0122-000	0
05-022	Pressurizer Preventative Repair, ER-2004-0122-000 ERCN10 ERCN11	0
06-001	Design Basis Accident Component Cooling Water Flow Rate Change	0

Miscellaneous

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION / DATE</u>
02-042	Onsite Safety Review Committee Meeting Minutes	August 21, 2002

Procedures

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION(S)</u>
EN-LI-100	Process Applicability Determination	1
EN-LI-101	10 CFR 50.59 Review Process	2
ENS LI-101	10 CFR 50.59 Review Program	7, 8

Screenings

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION(S) / CHANGE(S)</u>
ME-004-021	Emergency Diesel Generator	11, 12
ME-004-115	4.16/6.9 kV Magne-Blast Breaker Overhaul	1
MI-012-022	Bistable Adjustments for Low Power Physics Testing, Channels A, B, C, and D	1, 2
QAP-405	Flow Measurement	3
RF-001-015	Core Support Barrel Refueling Procedures	1
NOECP-332	Control of ASME Section XI Containment	1
OP-003-024	Sump Pump Operation	9/3, 10/0
CE-002-010	Maintaining Safety Injection Tank Chemistry	10/0

Section 1R04: Equipment Alignment (71111.04)

Procedures

Number	Title	Revision
OP-003-026	Shield Building Ventilation System	Revision 7
OP-009-002	Emergency Diesel Generator	Revision 19
OP-009-001	Containment Spray	Revision 11
OP-009-003	Emergency Feedwater	Revision 13

Miscellaneous Documents

Updated Final Safety Analysis Report
Vendor Technical Manual for Cooper Bessemer Emergency Diesel Generator, TM-C629.0305

Section 1R05: Fire Protection

Procedures

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

Condition Reports

CR-WF3-2006-2262

Section 1R07: Biennial Heat Sink Performance (71111.07)

Procedures

NUMBER	TITLE	REVISION
PMC-002-006	Erecting Scaffold	3
LOU-1564.279	Ebasco Specification Miscellaneous Hoisting Equipment Seismic Class 2	3
UNT-007-060	Control of Loose Items	1
LOU-1564.075	Component Cooling Water Heat Exchangers	3

Procedures

NUMBER	TITLE	REVISION
LOU-1564.068	Component Cooling Water Dry Cooling Towers	1
LOU-1564.729	Miscellaneous Hoisting Equipment	3
CE-002-003	Maintaining Auxiliary Component Water Chemistry	9
CE-002-013	Maintaining Essential Services Chiller Water Chemistry	1
PE-004-021	CCW Heat Exchanger Performance Test	1
PE-004-037	Heat Exchanger Performance Analysis	0
PE-001-016	Heat Exchanger Inspection Plan	1
W3-DBD-004	DBD Auxiliary Component Cooling Water System	3
W3-DBD-037	DBD Essential Chilled Water System	1
CE-002-007	Maintaining Component Cooling Water	17

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
ECM95-009	Ultimate Heat Sink Fan Requirements Under Various Ambient Conditions	1
5-T	Essential Chilled Water Cooling Loads & Coil Performance Determination	3
ECM95-008	Ultimate Heat Sink Design Basis	2
	Waterford 3 SES Wet Cooling Tower B Capability Summary	May 21, 1998
W3-ME-00-0002	Wet Cooling Tower Thermal Capacity Test	April 4, 2000
	B CCW Heat Exchanger and Wet Cooling Tower Test	Dec. 11, 2001

Work Orders

MAI# 419595, Task 021945

Condition Reports

CR-ECH-2006-00366	CR-WF3-2005-04258	LO-WLO-2006-00038
CR-WF3-2005-02884	CR-WF3-2006-00397	CR-WF3-2006-01875
CR-WF3-2006-02351	CR-WF3-2006-01991	CR-WF3-2006-01597
CR-WF3-2005-03084	CR-WF3-2006-00733	CR-WF3-2006-02079
CR-WF3-2006-02388	CR-WF3-2006-02115	
CR-WF3-2005-03308	CR-WF3-2006-00837	

Test Reports

LOU-1352.029, "Ultimate Heat Sink Test Evaluation," Revision 1
CCW Heat Exchanger A Thermal Performance Test
CCW Heat Exchanger B Thermal Performance Test
Containment Spray Heat Exchanger A & B Performance Tests
CCW Pump A, B & AB Performance Trend
CCW Train A & B Flow Balance Results
ACCW Flow Balance Results

Miscellaneous

External Corrosion Top Ten Action Plan
Auxiliary Component Cooling Water System Performance Indicators
Component Cooling Water System Performance Indicators
Chilled Water System Performance Indicators
Essential Chiller Reliability Top Ten Issue Action Plan

Section 1R12: Maintenance Rule (71111.12)

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

Condition Reports

CR-WF3-2004-2806	CR-WF3-2005-3017	CR-WF3-2005-5028
CR-WF3-2004-3458	CR-WF3-2005-3136	CR-WF3-2006-0183
CR-WF3-2004-4025	CR-WF3-2005-3432	CR-WF3-2006-0666
CR-WF3-2005-0596	CR-WF3-2005-4271	CR-WF3-2006-1096
CR-WF3-2005-1661	CR-WF3-2005-4500	CR-WF3-2006-1333
CR-WF3-2005-1961	CR-WF3-2005-4600	CR-WF3-2006-1905
CR-WF3-2005-2062	CR-WF3-2005-4690	CR-WF3-2006-2523
CR-WF3-2005-2533	CR-WF3-2005-4911	CR-WF3-2006-2527
CR-WF3-2005-2883		

Miscellaneous Documents

Engineering Report W-SE-2005-001	Waterford 3 Maintenance Rule Periodic (a)(3) Assessment	0
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Section 1R15: Operability Evaluations

Procedures:

NUMBER	TITLE	REVISION
EN-OP-104	Operability Evaluation	1
OP-901-501	PMC or Core Operating Supervisory System Malfunction	6
OP-035-000	Notification Matrix	6

Condition Reports

CR-WF3-2006-2560	CR-WF3-2006-2204	CR-WF3-2006-2258
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Section 1R17: Permanent Plant Modifications (71111.017B)

Condition Reports

CR-WF3-2004-01920
CR-WF3-2004-03219
CR-WF3-2006-01399

Drawings

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
04139	Pressurizer Bottom Head Heater Sleeve/Instrument Nozzle Repair	0
5817-12140	Pressurizer Instrument Nozzle Repair	0
G168 Sh. 3	Chemical & Volume Control System	12
G168 Sh. 2	Chemical & Volume Control System	48
G168 Sh. 1	Chemical & Volume Control System	41

Miscellaneous

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
WCAP-15973-P-A	Low-Alloy Steel Component Corrosion Analysis Supporting Small-Diameter Alloy 600/690 Nozzle Repair/Replacement Program	0

Modifications

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION</u>
ER-W3-2002-0278-001	Essential Chiller Cycle Timer Replacement	0
ER-W3-2003-0353-000	3716 Mwt Extended Power Uprate required changes to PPS Low SG Pressure Trip Bistable and annunciator setpoints.	0
ER-W3-2004-0121-000	Hot Leg Nozzle Preventative Repair	0
ER-W3-2004-0122-000	Pressurizer Preventative Repair	0
ER-W3-2004-0140-000	Replace RCS Hot Leg RTD EQ Seals	0

Modifications

<u>NUMBER</u>	<u>TITLE / DESCRIPTION</u>	<u>REVISION</u>
ER-W3-2004-0324-000	Installation of Bypass Valves for Alternate Flow Path Around the Isolation Valves in the Equalization (Cross-Connect) Line Between the Two EDG Fuel Oil Storage Tanks	0
ER-W3-2005-0388-000	Replace Emergency Diesel Generator Selector Switch - Local Panel (Electroswitch Model 7830ED)	0
ER-W3-2002-0470-000	Valves SI-125 A (B) and SI-412 A (B) Bonnet Bypass Isolation Valve Addition	0

Procedures

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION / CHANGE</u>
ENS-DC-115	ER Response Development	9
OP-009-002	Emergency Diesel Generator	19/1
OP-903-130	Verification of Locked Valves and Breakers	2/7
W2-109	Procedure Review, Development and Approval	6

Section 1R19: Postmaintenance Testing (71111.19)

Procedures

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
OP-903-043	Shield Building Ventilation System	9
CEP-NDE-0862	Eddy Current Examination of Non-Ferrous Tubing in Safety Related Components	0
OP-903-118	Primary Auxiliaries IST Valve Tests	6
PE-001-015	Administrative Procedure - Generic Letter 89-13 Heat Exchanger Test Basis	3

Procedures

NUMBER	TITLE	REVISION
ENS-MA-114	Post Maintenance Testing	5

Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
NRC Information Notice 2004-17	Loose Part Detection and Computerized Eddy Current Data Analysis in Steam Generators	0
NRC Information Notice 91-67	Problems with the Reliable Detection of Intergranular Attack (IGA) of Steam Generator Tubing	0
Generic Letter 89-13	Service Water System Problems Affecting Safety-Related Equipment	0
W3DBD-040	Fuel Handling Building Ventilation System	1-3
BOP-ET-06-001	Water chiller WC-1(3A) Cooler	0

Condition Reports

CR-ECH-2006-0366	CR-WF3-1996-1814	CR-WF3-2006-2230
CR-WF3-2006-3133	CR-WF3-2006-3133	CR-WF3-2006-2207
CR-WF3-2006-2351	CR-WF3-2006-2567	CR-WF3-1997-1727
CR-WF3-2006-2115	CR-WF3-2006-3133	CR-WF3-2006-2398
CR-WF3-2006-1932	CR-WF3-2006-2418	

Work Orders

13173, 90728, 26998, 51031575, 51032240, 93213

Section 1R22: Surveillance Testing (71111.22)

Procedures

NUMBER	TITLE	REVISION
OP-009-002	Emergency Diesel Generator	19

OP-903-050	Component Cooling Water and Auxiliary Component Cooling Water Pump and Valve Operability Test	17
OP-903-121	Safety Systems Quarterly IST Valve Tests	7
MM-007-033	IST Safety and Relief Valve Bench Testing and Maintenance	0
STA-001-001	Containment Air Lock Door Seal Leakage Test	4
ME-003-110	Fire Pump Diesel Starting Battery (Quarterly)	7
OP-903-046	Emergency Feed Pump Operability Check	Revision 15
ME-003-110	Fire Pump Diesel Starting Battery (Quarterly)	7
MM-007-033	IST Safety and Relief Valve Bench Testing and Maintenance	0
OP-903-011	High Pressure Safety Injection Pump Preservice Operability Check	9
CEP-IST-1	IST Bases Document	3

Condition Reports

CR-WF3-2001-0782	CR-WF3-2001-1284
CR-WF3-2004-0149	CR-WF3-2004-0500

Work Orders

51040121, 51024833, 51020508, 51021167, 5101888, 51028329

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

Procedure

NUMBER	TITLE	REVISIONS
OP-009-005	Shutdown Cooling	15
EN-LI-113	Licensing Basis Document Change Process	1

MM-007-033	IST Safety and Relief Valve Bench Testing and Maintenance	0
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Miscellaneous Documents

NUMBER	TITLE/SUBJECT	REVISION
MN(Q)9-65	CCW Temperature Evaluation	2
ER-W3-2004-0345	Evaluation of Elevated CCW Temperature	000

Condition Reports

CR-WF3-2004-1601
CR-WF3-2003-2557