



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064**

June 1, 2001

John T. Herron  
Vice President Operations  
Waterford 3  
Entergy Operations, Inc.  
17265 River Road  
Killona, Louisiana 70066-0751

**SUBJECT: Waterford Steam Electric Station, Unit 3 - NRC INSPECTION REPORT  
50-382/01-03**

Dear Mr. Herron:

On May 11, 2001, the NRC completed an inspection at your Waterford Steam Electric Station, Unit 3. The enclosed report documents the inspection findings which were discussed on May 11, 2001, with Mr. E. Ewing and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Jeffrey L. Shackelford, Chief  
Engineering and Maintenance Branch  
Division of Reactor Safety

Entergy Operations, Inc.

-2-

Docket: 50-382

License: NPF-38

Enclosure:

NRC Inspection Report

50-382/01-03

cc w/enclosure:

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-3-

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- Section Chief, DRP/TSS **(PHH)**
- RITS Coordinator **(NBH)**
- Scott Morris **(SAM1)**
- NRR Event Tracking System **(IPAS)**
- WAT Site Secretary **(AHY)**

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**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket: 50-382

License: NPF-38

Report No.: 50-382/01-03

Licensee: Entergy Operations, Inc.

Facility: Waterford Steam Electric Station, Unit 3

Location: Hwy. 18  
Killona, Louisiana

Dates: April 23 through May 11, 2001

Team Leader: L. E. Ellershaw, Senior Reactor Inspector

Inspectors: C. A. Clark, Reactor Inspector  
R. W. Deese, Reactor Inspector  
P. A. Goldberg, Reactor Inspector  
R. L. Nease, Senior Reactor Inspector  
C. J. Paulk, Senior Reactor Inspector

Accompanying Personnel: J. Leivo, Consultant

Approved By: Jeffrey L. Shackelford, Chief  
Engineering and Maintenance Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

IR 05000382/01-03; on 04/23-05/11/2001; Entergy Operations, Inc.; Waterford Steam Electric Station, Unit 3; Inspection of Safety System Design and Performance Capability, and Evaluations of Changes, Tests, or Experiments.

The inspection was conducted by region based inspectors and one contractor. The significance of most findings is indicated by their color (green, white, yellow, red) using IMC 0609, "Significance Determination Process." Findings for which the significance determination process does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

### **Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity**

No findings of significance were identified.

## Report Details

### 1. REACTOR SAFETY

#### Introduction

Inspections of safety system design and performance capability, and evaluations of changes, tests, or experiments were performed at Waterford Steam Electric Station, Unit 3. These inspections were conducted to verify, respectively, that the initial design and subsequent modifications have preserved the design basis of selected systems and related support systems, and that changes to the facility or procedures as described in the Final Safety Analysis Report (FSAR) and tests or experiments not described in the FSAR are reviewed and documented in accordance with 10 CFR 50.59. Additionally, the inspection effort served to monitor the capability of the selected systems to perform the design basis functions and to verify that safety issues pertinent to the changes are resolved. These inspectable areas verify aspects of the initiating events, mitigating systems, and barrier integrity cornerstones.

The probabilistic risk analysis for Waterford Steam Electric Station, Unit 3, is based on the capability of the as-built safety systems to perform their intended safety functions successfully. The area and scope of the inspection were predetermined by reviewing the licensee's probabilistic risk analysis to identify the risk-dominant systems, structures, and components, ranked by importance, and their potential contribution to dominant accident sequences and/or initiators. The primary review prompted a parallel review of support and interfacing systems, such as, electrical power.

The objective of this inspection was to assess the adequacy of calculations, analyses, other engineering documents, and engineering and operating practices that were used to support the performance of the emergency feedwater system and the Class 1E 4160 volt distribution system. The inspection was performed by a team of inspectors that consisted of a team leader, Region IV inspectors, and a contractor. Acceptance criteria utilized by the NRC inspection team included the Waterford Steam Electric Station, Unit 3, technical specifications, applicable sections of the Final Safety Analysis Report, applicable industry codes, and industry initiatives implemented by the licensee's programs.

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

##### a. Inspection Scope

The inspector reviewed a selected sample of eight safety evaluations to verify that the licensee 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 inspector reviewed a selected sample of 20 safety evaluation screenings, in which the licensee determined that safety evaluations were not required, to ensure that the licensee's exclusion of a full evaluation was consistent with the requirements of 10 CFR 50.59, "Evaluations of Changes, Tests, or Experiments."

The inspector reviewed 10 action requests initiated by the licensee that addressed problems or deficiencies associated with 10 CFR 50.59 to ensure that appropriate corrective actions were being taken. The inspector also reviewed licensee self-assessments to ensure that problems or deficiencies were appropriately addressed.

b. Findings

No findings of significance were identified.

1R21 Safety System Design and Performance Capability (71111.21)

.1 System Requirements

a. Inspection Scope

The team reviewed the following attributes for the emergency feedwater system and the Class 1E 4160 volt electrical distribution system: process medium (water, air, electrical signal), energy sources (electrical and air), control systems, and equipment protection. The team also reviewed calculations, which verified that the net-positive suction head available from the condensate storage pool was greater than the net-positive suction head required for the emergency feedwater pumps. Calculations for the air operated valve nitrogen accumulators were reviewed to verify that there was sufficient nitrogen for the valves. The team also reviewed other applicable mechanical and electrical calculations. The team verified that procedural instructions to operators were consistent with operator actions required to meet, prevent, and/or mitigate design basis accidents. To do this, the team reviewed abnormal and emergency operating procedures, and requirements and commitments identified in the FSAR, technical specifications, design basis documents, and plant drawings. The team reviewed alarm setpoints and verified that instrumentation and alarms were available to operators for making necessary decisions in coping with postulated accident conditions. In addition, the team verified that system alignments were consistent with design and licensing basis assumptions. The review also considered requirements and commitments identified in the FSAR, technical specifications, design basis documents, and plant drawings. The purpose of these reviews was to verify that the emergency feedwater and the Class 1E 4160 volt electrical distribution systems' needs were met.

b. Findings

No findings of significance were identified.



.2 System Condition and Capability

a. Inspection Scope

The team reviewed periodic testing procedures (listed in the attachment) and results to verify that the design requirements were demonstrated by the performance of tests. The team also verified the environmental qualification of a sample of system components for operation under design environmental conditions and assumed operating parameters (e.g., voltage, speed, and power).

The team also reviewed each system's operations by conducting system walkdowns, review of normal, abnormal, and emergency operating procedures; and review of the FSAR, technical specifications, and design calculations, drawings, and procedures.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems (71152)

a. Inspection Scope

The team reviewed a sample of station emergency feedwater system and the Class 1E 4160 volt electrical distribution system problems identified by the licensee in the corrective action program to evaluate the effectiveness of corrective actions related to design issues. The team also reviewed Procedure LI-102, "Corrective Action Process," Revision 0. The specific corrective action documents that were sampled and reviewed by the team are listed in the attachment to this report. Inspection Procedure 71152, "Identification and Resolution of Problems," was used as guidance to perform this part of the inspection.

The team reviewed the actions the licensee has taken in response to industry-identified problems with the station emergency feedwater system, the Class 1E 4160 volt electrical power distribution system, and support equipment. This review included the status of corrective actions taken for 4.16 kV General Electric Magnablast circuit breakers.

b. Findings

No findings of significance were identified.

.4 System Walkdowns

a. Inspection Scope

The team performed selective field inspections of the 4160 Vac switchgear, auxiliary panels, cable spreading room, main control board sections, emergency feedwater pump rooms, and the area on top of the reactor auxiliary building containing the emergency

feedwater isolation and turbine steam supply valves. The purpose of these walkdowns was to assess the adequacy of material condition and installation configurations by focusing on the installation and configuration of piping, components, and instruments; the placement of protective barriers and systems; the susceptibility to flooding, fire, or other environmental concerns; physical separation; provisions for high energy line break; accessibility for operator action; and the conformance of the currently installed configuration of the systems with the design and licensing bases.

b. Findings

No findings of significance were identified.

.5 Design Review

a. Inspection Scope

(i) Electrical, Instrumentation and Control

The team reviewed the electrical, and instrumentation and control aspects of the emergency feedwater system, as well as selected design, maintenance, and operational aspects of the 4160 volt distribution system, exclusive of the diesel generators.

For the emergency feedwater system inspection, the team reviewed electrical calculations for emergency feedwater motor acceleration, motor protection, feeder ampacity, dc voltage to selected emergency feedwater motor operated valves and selected motor operated valve thermal overload sizing. In addition, the team performed a selective review of instrument setpoint and uncertainty calculations, as well as control circuits supporting initiation and control of emergency feedwater.

For the 4160 volt system inspection, the team selectively reviewed calculations for load flow, short circuit, degraded voltage, and protective relay settings, as well as the bus transfer scheme. The team also reviewed a sample of condition reports and maintenance action items for the 4160 volt system.

(ii) Mechanical

The team reviewed the systems' design to verify that the systems would function as required under accident conditions. The review included design assumptions, calculations, boundary conditions, and modifications. The team also performed a single failure review of individual components to determine the potential effects of such failures on the capability of the systems to perform their safety functions. Additionally, the team performed informal analyses in several areas to verify that design values were correct and appropriate. Documentation reviewed included drawings, procedures, calculations, safety evaluation reports, condition reports, and maintenance work orders identified in the attachment, as well as technical specifications, and the FSAR. The team verified implementation of seismic requirements for 4160 volt and 480 volt Class 1E electrical cabinets by reviewing engineering analyses and operating procedures governing the configuration of breakers in safety related switchgear cabinets to ensure that their

seismic qualification was maintained. The team also reviewed the design basis for the high energy line break exclusion area on the main steam and main feedwater systems as documented in the FSAR and the NRC's SER of July 1981. The purpose of the reviews was to determine whether the design bases of the systems were met by the installed and tested configurations.

b. Findings

No findings of significance were identified.

.6 Safety System Testing

a. Inspection Scope

The team reviewed the program and procedures for inservice testing and inspection of the safety-related valves and pumps in the emergency feedwater system. The review included flow balancing and startup testing results; pump manufacturer pump curves; and pump and valve inservice test records.

b. Findings

No findings of significance were identified.

**4 OTHER ACTIVITIES (OA)**

4OA6 Management Meetings

Exit Meeting Summary

On May 11, 2001, the team leader presented the inspection results to Mr. E. Ewing and other members of licensee management at the conclusion of the onsite inspection. The licensee's management acknowledged the findings presented.

The inspectors asked the licensee's management whether any materials examined during the inspection should be considered proprietary. While the licensee's representatives noted that some proprietary information had been reviewed by the team, no proprietary information is contained in this report.

## ATTACHMENT

### KEY POINTS OF CONTACT

#### Licensee

C. Alday, Superintendent, Reactor Engineering  
M. Berendt, Supervisor, Systems Engineering  
L. Borel, Licensing Engineer  
J. Burke, Civil Design Engineer  
M. Brandon, Licensing Manager  
T. Brennan, Technical Support Coordinator, Design Engineering  
R. Douet, Manager, Operations  
C. Fugate, Manager, Technical Support  
J. Fugate, System Engineer  
R. Gilmore, Acting Supervisor, Instrumentation & Controls  
P. Gropp, Manager, Design Engineering  
M. Groome, Engineer, Design Engineering  
K. Hall, Senior Lead, Technical Specialist, Corporate Engineering  
A. Harris, Director, Nuclear Safety Assessment  
J. Holman, Manager, Safety Analysis  
P. Jackson, System Engineer, 4160 Vac System  
R. Jackson, Engineered Safety Features Actuation System Engineer  
R. Killian, Supervisor, Quality Assurance  
T. Lett, Superintendent, Radiation Protection  
D. Marpe, Manager, Projects and Components Engineering  
S. Matharu, Supervisor, Electrical Design  
B. Matthew, Manager, Engineering Support  
B. McDonald, Superintendent, Plant Electrical Maintenance  
R. Petters, Manager, Corrective Action and Assessments  
O. Pipkins, Senior Licensing Engineer  
M. Raines, Environmental Qualification Engineer  
G. Robin, Supervisor, Code Programs  
J. Russo, Design Engineer, Mechanical  
J. Schreckengast, Shift Manager, Operations  
C. Talazac, System Engineer  
W. Tregre, Supervisor, Electrical Maintenance  
D. Viener, Supervisor, Design Engineering, Mechanical  
K. Walsh, Outage Manager  
E. Wiegert, Senior Engineer, Safety and Engineering Analysis  
R. Williams, Licensing Engineer

#### NRC

T. Farnholtz, Senior Resident Inspector

## DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

### **CALCULATIONS**

NUMBER	DESCRIPTION	REVISION
MN(Q)9-5	Condensate System	01
EC-M93-009	SER 92-02- Feedwater Piping overpressurization During System Heat-Up	00
EC-M98-010	ACCW Supply to Emergency Feedwater System	00
C-PENG-CALC-015	Computer Simulation of a Natural Circulation Cooldown in Accordance with the Requirements of Branch Technical Position 5-1	00
A-WS-FE-0237	WSES-3 Post-LOCA Long Term Cooling Analysis for Decreased HPSI Flow	00
EC-S97-016	WSES-3 Analysis of 575 gpm EFW Flow and LOCV Events with the Inclusion of RCP Heat	01
MN(Q)10-1	Emergency Feedwater System Head Curves	02
MN(Q)10-9	NPSH Available to Emergency Feedwater Pumps	00
MN(Q)9-5	Condensate Storage Pool Minimum Temperature	01
EC-M92-041	MOV Design Basis Review Calculation	02
EC-M98-026	RELAP Analysis of EFW Steam Supply Line During Startup for Anchor Darling MS-401 Valves	00
EC-M88-024	Accumulator V, VIII, IX and X Sizing Calculation	03
EC-M98-013	WCT Basin Flo to Condensate Storage Pool and EFW Pump Design Basis Review Calculation Upgrade Program Phase II, Group 2	00
MN(Q)10-12	Emergency Feedwater pump (Turbine Driven) Minimum NPSH	0
MN(Q)10-21	Main Steam to EFW Turbine	0

**CALCULATIONS**

NUMBER	DESCRIPTION	REVISION
EC-I91-003	Instrument Loops EFWIL 9013 A and B	November 11, 1997
MN(Q)3-5	Flooding Analysis Outside Containment	3
MN(Q)9-9	Wet Cooling Tower Losses During LOCA	04
DCP-3526	EFW Heat Trace Reliability Improvements	02
DCP-3530	Emergency Feedwater Pump Turbine Steam Supply Line Condensate Drains	02
DCP-3539	Vortex Breakers for RWSP and CSP	1
EC-E89-008	Electrical Design Criteria [Determined ampacity of EFW motor feeders]	2, Change 2
EC-E90-006	Emergency Diesel Generator Loading and Fuel Oil Consumption	4, Change 8
EC-E91-016	Battery 3AB-S Cell Sizing	5, Change 6
EC-E91-050	Degraded Voltage Relay Setpoint & Plant Load Study	4
EC-E91-055	Calculation of Balanced Fault Currents at the 6.9 kV, 4.16 kV, & 480 V Level; Calculation of Unbalanced Fault Currents at the 1E 208/120V Level	3, Change 4
EC-E91-056	Relay Settings & Coordination Curves for 6.9 kV 4.16 kV and 480V Buses	1, Change 10
EC-E91-057	Verification of Degraded Voltage Computer Model by Actual Measurement	0
EC-E91-059	Battery 3B-S "B-Train" Calculation for Station Blackout	3, Change 2
EC-E91-060	Battery 3AB-S Calculation for Station Blackout (Numarc 37-00)	3, Change 6
EC-E91-062	Battery 3B-S Cell Sizing	5, Change 6
EC-E95-001	Sizing Thermal Overload Heaters for Motor Operated Valves	1
EC-I91-009	Steam Generator Pressure Instrumentation Loop Uncertainty	1

EC-I92-012	Steam Generator Level (Wide Range) Instrumentation Loop Uncertainty Calculation	0, Change 1
EC-I92-019	Plant Protection System Setpoint Uncertainty Calculation	2, Change 5
EE3-21-02	Motor Acceleration Time - Incremental Method: Emergency Feedwater Pump	0

**DRAWINGS**

NUMBER	DESCRIPTION	REVISION
G153 Sheet 4	Flow Diagram Feedwater, Condensate & Air Evacuation Systems	37
G-160 Sheet 2	Flow Diagram Component Closed Cooling Water System	48
G-160 Sheet 5	Flow Diagram Component Closed Cooling Water System	48
G-160 Sheet 6	Flow Diagram Component Closed Cooling Water System	11
G-151, Sh. 1 of 4	Flow Diagram - Main & Extraction Steam System	40
G-137	General Arrangement - Reactor Auxiliary Bldg. Plan El. -35.00'	26
G-144	General Arrangement - Reactor Auxiliary Bldg. Plan El. +21.00	27
G-143	General Arrangement - Reactor Auxiliary Bldg. Plan El. +46.00	30
LOU-1564 B-289 Sheet 15	Power Distribution & Motor Data: 4.16 kV Switchgear 3A3-S One Line Diagram	10
LOU-1564 B-289 Sheet 15-1	Power Distribution & Motor Data: 4.16 kV Switchgear 3A3-S One Line Diagram	4
LOU-1564 B-289 Sheet 17	Power Distribution & Motor Data: 4.16 kV Switchgear 3AB3-S One Line Diagram	11
LOU-1564 B-424 Sheet 170S	Control Wiring Diagram: ESFAS Auxiliary Relays	13
LOU-1564 B-424 Sheet E507	Control Wiring Diagram: High Pressure Safety Injection Pump AB	3

NUMBER	DESCRIPTION	REVISION
LOU-1564 B-424 Sheet 507S	Control Wiring Diagram: High Pressure Safety Injection Pump AB	11
LOU-1564 B-424 Sheet E1531	Control Wiring Diagram: Emergency Feedwater Pump A	5
LOU-1564 B-424 Sheet 1531S	Control Wiring Diagram: Emergency Feedwater Pump A	11
LOU-1564 B-424 Sheet 1533S	Control Wiring Diagram: Emergency Feedwater Pump B	10
LOU-1564 B-424 Sheet E1535	Control Wiring Diagram: Emergency Feedwater Pump Turbine Steam Shut-Off Valve 2MS-V611A	8
LOU-1564 B-424 Sheet 1535S	Control Wiring Diagram: Emergency Feedwater Pump Turbine Steam Shut-Off Valve 2MS-V611A	19
LOU-1564 B-424 Sheet 1540S	Control Wiring Diagram: Emergency Feedwater Pump Stop Valve	18
LOU-1564 B-424 Sheet 1546S	Control Wiring Diagram: SG No. 1 Emergency Feedwater Isolation Valve 2FW-V848A	12
LOU-1564 B-424 Sheet E1546	Control Wiring Diagram: SG No. 1 Emergency Feedwater Isolation Valve 2FW-V848A	2
LOU-1564 B-424 Sheet E1551 1A	Control Wiring Diagram: SG No. 1 Emergency Feedwater Primary Control Valve 2FW-V851B	4
LOU-1564 B-424 Sheet E1551 2A	Control Wiring Diagram: SG No. 1 Emergency Feedwater Backup Control Valve 2FW-V852A	3
LOU-1564 B-424 Sheet E1551 1B	Control Wiring Diagram: SG No. 1 Emergency Feedwater Primary Control Valve 2FW-V851B	3
LOU-1564 B-424 Sheet E1551 2B	Control Wiring Diagram: SG No. 1 Emergency Feedwater Backup Control Valve 2FW-V852A	3
LOU-1564 B-424 Sheet 1552S 1A	Control Wiring Diagram: SG No. 2 Emergency Feedwater Control Valves 2FW-853A & -854B	2
LOU-1564 B-424 Sheet E2258	Control Wiring Diagram: Startup Transformer to Bus 3B2 Breaker	10
LOU-1564 B-424 Sheet E2381	Control Wiring Diagram: 4.16 kV Bus 3B2 Tie to Bus 3B3-S	0
LOU-1564 B-424 Sheet 2382S	Control Wiring Diagram: 4.16 kV Bus 3B3-S Tie to Bus 3B2	0



NUMBER	DESCRIPTION	REVISION
LOU-1564 G-285	Main One Line Diagram	14
LOU-1564 G-286	Key Auxiliary One Line Diagram	16
LOU-1564 G-287 Sheet 1	125 Vdc and 120 Vac One Line Diagram	18
LOU-1564 G-287 Sheet 2	125 Vdc and 120 Vac One Line Diagram	2

**ENGINEERING REPORTS**

NUMBER	DESCRIPTION	REVISION
ER-W3-01-0261-00	Increase Speed Setpoint for EFW Turbine Driven Pump AB	01
ER-W3-99-0083-00-01	EFW Quality for Chapter 15 Events	June 27, 1999
ER-W3-01-272-00	Elimination of OP-903-046 one minute requirement to obtain Discharge Pressure Data for the EFW AB Pump	00
ER-W3-99-196-00	Evaluation of Replacement for EFWIST8350AB-Terry Turbine Electronic Overspeed Monitor	02
ER-W3-97-0390-00	Instrument Accuracy for Inservice Testing	0

**PROCEDURES**

NUMBER	DESCRIPTION	REVISION
LI-102	Corrective Action Process	0
OE-100	Operating Experience Program	0
OEEP-103	Operating Experience Review (Superceded by OE-100)	2
MD-001-040	Maintenance Action Item Performance and Documentation	1
ME-004-115	4.16/6.9 kV Magne-Blast Operating Mechanism Overhaul	0
PLG-009-009	Maintenance Action Item Planning	1
LI-101	10 CFR 50.59 Review Program	0
ME-004-371	Emergency Feedwater Pump Motor	8
UNT-005-003	Clearance Request, Approval and Release	16

NUMBER	DESCRIPTION	REVISION
UNT-005-007	Plant Lubrication Program	7
OP-100-009	Control of Valves and Breakers	01
OP-903-046	Emergency Feed Pump Operability Check	14
OP-903-014	Emergency Feedwater Flow Verification	10
OP-903-130	Verification of Locked Valves and Breakers	01
OP-003-033	Main Feedwater System Operating Procedure	0
OP-500-011	Control Room Cabinet M	14
OP-500-012	Control Room Cabinet N	16
OP-500-013	Control Room Cabinet SA	10
OP-500-014	Control Room Cabinet SB	8
OP-902-007	Steam Generator Tube Recovery	9
UNT-007-060	Control of Loose Items	0
UNT-005-018	Control of Work on Electrical Equipment	7
UNT-006-021	Pump and Valve Inservice Testing	3
OI-004-000	Operating Instruction: Operations Narrative & Shift Logs	27
OP-006-001	Operating Procedure: Plant Distribution (7kV, 4 kV and SSD) System	11
OP-010-003	Operating Procedure: Plant Startup [bus alignment]	0, Change 6
OP-500-004	Annunciator Response, Control Room Cabinet D Window S-7, 4 kV Bus 3A3-S Voltage Low	12
OP-901-310	Off-normal Procedure, Loss of 4160 V Safety Bus A	1
OP-902-009	Standard Appendix 12, Electrical Restoration, Attachment 12-A, 6.9 kV & 4.16 kV Nonsafety Bus Restoration	1
OP-903-001	Attachments 11, 15: Electrical Distribution Operability Check	22, Change 11

**CONDITION REPORTS**

1995-1119	1998-0366	1998-1102	2000-0130	2001-0261
1997-0873	1998-0393	1998-1109	2000-0441	2001-0317
1997-1012	1998-0683	1999-0146	2000-0483	2001-0352
1997-1587	1998-0684	1999-0159	2000-0976	2001-0433
1997-1814	1998-0706	1999-0471	2000-1285	2001-0436
1997-1898	1998-0844	1999-0618	2000-1290	2001-0477
1997-2767	1998-0900	1999-0651	2000-1451	2001-0480
1998-0203	1998-0904	1999-0697	2000-1496	2001-0522
1998-0225	1998-1051	1999-0836	2000-1565	
1998-0248	1998-1088	1999-1107	2001-0250	

**WORK ORDERS/WORK REQUESTS**

004878	425201	3097324	2000-0538	2000-1331
288516	01156649	1999-1143	2000-0575	2000-1568
307534	01162846	1999-1187	2000-0583	2001-0410
425199	01173894	2000-0017	2000-0800	2001-0522
425200				

**MISCELLANEOUS DOCUMENTS**

NUMBER	DESCRIPTION	REVISION
W3-DBD-003	Emergency Feedwater System Design Basis Document	2
Feedwater Pump Data Report	Emergency Feedwater Pump AB Speed Corrected Differential Pressure IST Data	4/25/01
OP-903-046-518 Data Sheet	Emergency Feed Pump Periodic Surveillance Test Results	5/1/98 to 4/18/01
STP-01426183	Special Test Procedure Emergency Feedwater Pump AB Data Acquisition Test Data	4/18/01
NUREG-0787	Safety Evaluation Report Related to the Operation of Waterford Steam Electric Station, Unit No. 3	July 1981
Second IST Test Interval	Pump And Valve Inservice Test Plan	2
Transmittal Memo No. 97-189	Seismic Re-qualification of 4.16 kV Switchgears with Breakers in the Racked-out position	April 15, 1998
Transmittal Memo No. 97-190	Seismic Re-qualification of General Electric 480 V AKD-6 Switchgears with Breakers in the Racked-out position	January 28, 1998

**MISCELLANEOUS DOCUMENTS**

NUMBER	DESCRIPTION	REVISION
Inter-Office Correspondence W3C5-96-0127	Safety Class 1E 480 V Switchgear Interim Operation/Maintenance Guidance	November 22, 1996
Ebasco Specification LOU- 1564.110A	Control Valves & Accessories & Line Service Solenoid Valves	15
Ebasco Specification LOU- 1564.117	Emergency Steam Generator Feed Pumps and Accessories	01
	Operating Experience Status Report	01/03/01
	Operating Experience Status Report	11/30/00
	Operating Experience Status Report	11/02/00
	Operating Experience Status Report	09/00
	August 2000 Operating Experience Monthly Report	09/07/00
	July 2000 Operating Experience Monthly Report	08/10/00
	June 2000 Operating Experience Monthly Report	07/18/00
	May 2000 Operating Experience Monthly Report	05/19/00
	March 2000 Operating Experience Monthly Report	04/17/00
	February 2000 Operating Experience Monthly Report	03/20/00
	January 2000 Operating Experience Monthly Report	01/10/00
	Operating Experience Closure Package for SOER 99-01	06/01/00
	Operating Experience Closure Package for IN 00-06	06/01/00
	Operating Experience Closure Package for IN 98-38	12/15/99
	Operating Experience Closure Package for IN 98-41	11/17/99
	Operating Experience Closure Package for IN 98-24	11/01/99
	Operating Experience Closure Package for IN 98-21	11/01/99
	Operating Experience Closure Package for IN 99-13	07/22/99
	Operating Experience Closure Package for IN 98-43	12/16/98

**Safety Evaluations**

98-035	98-076	98-088	99-027
98-043	98-083	98-099	00-019

**Safety Evaluation Screenings**

ER-W3-00-0330-00-00	ME-003-315	OP-001-002
ER-W3-01-0039-00-02	ME-003-330	OP-003-019
ER-W3-97-0558-00-00	ME-004-142	OP-004-006
ER-W3-98-0830-00-00	ME-004-145	OP-009-007
ER-W3-99-0781-01-00	ME-004-235	OP-901-510
ER-W3-99-0889-00-00	ME-004-485	OP-903-035
ER-W3-99-1039-00-00	MI-005-593	

**Licensee Assessment**

QS-98-053, 10 CFR 50.59 Evaluations, November 2 through December 2, 1998