UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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ARLINGTON, TEXAS 76011-4005

February 20, 2004

George A. Williams, Site Vice President
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Entergy Operations, Inc.
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Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION - NRC INSPECTION REPORT 05000416/2004-006

Dear Mr. Williams:

On January 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed the onsite portion of an inspection at your Grand Gulf Nuclear Station. In-office inspection was continued through February 5, 2004, to review issues associated with preventive maintenance practices applicable to containment structures and support systems. The enclosed report documents the inspection findings, which were discussed on January 30, 2004, with you and other members of your staff, and during a subsequent telephone call on February 19, 2004, with Mr. M. Krupa, Director, Nuclear Safety Assurance.

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. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, 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 and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Charles S. Marschall, Chief
Engineering Branch
Division of Reactor Safety

Docket: 50-416
License: NPF-29

Enclosure: NRC Inspection Report
05000416/2004-006

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket Nos:	50-416
License Nos:	NPF-29
Report No:	05000416/2004-006
Licensee:	Entergy Operations, Inc.
Facility:	Grand Gulf Nuclear Station
Location:	Waterloo Road Port Gibson, Mississippi 39150
Dates:	January 12 through February 19, 2004
Team Leader:	L. E. Ellershaw, Senior Reactor Inspector, Engineering Branch
Inspectors:	C. E. Johnson, Senior Reactor Inspector, Engineering Branch J. M. Mateychick, Reactor Inspector, Engineering Branch W. M. McNeill, Reactor Inspector, Engineering Branch W. C. Sifre, Reactor Inspector, Engineering Branch
Approved by:	Charles S. Marschall, Chief Engineering Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000416/2004006; 01/12/2004 through 02/19/2004, Grand Gulf Nuclear Station; Evaluation of Changes, Tests, or Experiments, and Safety System Design and Performance Capability

The NRC conducted an inspection with five regional inspectors. No findings of significance were identified. 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.

NRC-Identified Findings and Self-Revealing Findings

No findings of significance were identified.

Report Details

1. REACTOR SAFETY

Introduction

The NRC conducted an inspection to verify that licensee personnel adequately preserved the facility safety system design and performance capability and that licensee personnel preserved the initial design in subsequent modifications of the systems selected for review. The scope of the review also included any necessary nonsafety-related structures, systems, and components that provided functions to support safety functions. This inspection also reviewed the licensee's programs and methods for monitoring the capability of the selected systems to perform the current design basis functions. This inspection verified aspects of the initiating events, mitigating systems, and barrier cornerstones.

The licensee personnel based the probabilistic risk assessment model for the Grand Gulf Nuclear Station on the capability of the as-built safety systems to perform their intended safety functions successfully. The team determined the area and scope of the inspection by reviewing the licensee's probabilistic risk analysis models to identify the most risk significant systems, structures, and components. The team established this according to their ranking and potential contribution to dominant accident sequences and/or initiators. The team also used a deterministic approach in the selection process by considering recent inspection history, recent problem area history, and all modifications developed and implemented.

The minimum sample size for this procedure is one risk-significant system for mitigating an accident or maintaining barrier integrity. The team completed the required sample size by reviewing the containment structures. The primary review prompted parallel review and examination of support systems, such as, containment atmosphere control, standby gas treatment, residual heat removal (containment spray and shutdown cooling modes), and related structures and components.

The team assessed the adequacy of calculations, analyses, engineering processes, and engineering and operating practices that licensee personnel used for the selected safety system and the necessary support systems during normal, abnormal, and accident conditions. Acceptance criteria used by the team included NRC regulations, the technical specifications, applicable sections of the Updated Final Safety Analysis Report, applicable industry codes and standards, and industry initiatives implemented by the licensee's programs.

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

a. Inspection Scope

The minimum sample size for this procedure is 6 evaluations and 12 screenings. The team reviewed 7 licensee-performed 10 CFR 50.59 evaluations 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. These evaluations had been performed since the last NRC inspection of 10 CFR 50.59 activities.

The team reviewed an additional 14 licensee-performed 10 CFR 50.59 screenings, in which the licensee personnel determined that 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.

The team reviewed and evaluated the most recent licensee 10 CFR 50.59 program self assessment and 16 corrective action documents written since the last NRC 10 CFR 50.59 inspection to determine whether licensee personnel conducted sufficient in-depth analyses of their program to allow for the identification and subsequent resolution of problems or deficiencies.

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 inspected the following attributes of the reactor containment structures: (1) process medium (water, steam, and air), (2) energy sources, (3) control systems, and (4) equipment protection. The team examined the procedural instructions to verify instructions as consistent with actions required to meet, prevent, and/or mitigate design basis accidents. The team also considered requirements and commitments identified in the Updated Safety Analysis Report, technical specifications, design basis documents, and plant drawings. In conjunction with the primary review of the reactor containment structures, a parallel review and examination of support systems, such as, containment atmospheric control, standby gas treatment, residual heat removal (containment spray and shutdown cooling modes), penetrations, and related structures and components was also conducted.

b. Findings

No findings of significance were identified.

.2 System Condition and Capability

a. Inspection Scope

The team reviewed the periodic testing procedures for the containment and support systems to verify that the capabilities of the systems were verified periodically. The

team also reviewed the systems' operations by conducting system walkdowns; reviewing normal, abnormal, and emergency operating procedures; and reviewing the Updated Final Safety Analysis Reports, technical specifications, design calculations, drawings, and procedures.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The team reviewed a sample of problems associated with containment structures and support systems that were identified by licensee personnel in the corrective action program to evaluate the effectiveness of corrective actions related to design issues. The sample included open and closed condition reports for the past three years and 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. Older condition reports that were identified while performing other areas of the inspection were also reviewed.

b. Findings

No findings of significance were identified.

.4 System Walkdowns

a. Inspection Scope

The team performed walkdowns of the accessible portions of the containment structures and support systems. The team focused on the installation and configuration of switchgear, motor control centers, manual transfer switches, field cabling, raceways, piping, components, and instruments. During the walkdowns, the team assessed:

- The placement of protective barriers and systems,
- The susceptibility to flooding, fire, or environmental conditions,
- The physical separation of trains and the provisions for seismic concerns,
- Accessibility and lighting for any required operator action,
- The material conditions and preservation of systems and equipment, and
- The conformance of the currently-installed system configurations to the design and licensing bases.

b. Findings

No findings of significance were identified.

.5 Design Review

a. Inspection Scope

The team reviewed the current as-built instrument and control, electrical, and mechanical design of the containment structures and support systems. These reviews included an examination of design assumptions, calculations, environmental qualifications, required system thermal-hydraulic performance, electrical power system performance, control logic, and instrument setpoints and uncertainties. The team assessed the adequacy of calculations, analyses, test procedures, and operating procedures that licensee personnel used during normal and accident conditions.

The team also reviewed the adequacy of the combustible gas control system's original design to control hydrogen concentrations in the drywell and containment during post-accident conditions, including maintaining the capability of the selected support systems to perform their design basis functions. The support systems reviewed in detail were the drywell and containment hydrogen analyzer system, hydrogen igniter system, hydrogen recombiner system and drywell purge system.

b. Findings

No findings of significance were identified.

6. Safety System Inspection and Testing

a. Inspection Scope

The team reviewed the program and procedures for testing and inspecting selected components for the containment structures and support systems. The review included the results of surveillance tests required by the technical specifications and selective review of in-service tests.

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

The inspection findings were acknowledged during an exit meeting presented by the team leader on January 30, 2004, to Mr. G. A. Williams, and other members of licensee management staff and during a subsequent telephone call on February 19, 2004, with Mr. M. Krupa, Director, Nuclear Safety Assurance. The team leader confirmed that proprietary information had not been presented to the team for review.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

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C. Bottemiller, Manager, Plant Licensing, Nuclear Safety Assurance
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DOCUMENTS REVIEWED

Calculations

NUMBER	DESCRIPTION	REVISION
Q 2.3.3	Sizing of Hydrogen Recombiners	B
XC-Q1E61-01005	Design Basis Hydrogen Analysis with 10x10 Reload Fuel	0
3.9.3	Standby Gas Treatment System (SGTS) Sizing	1
3.9.8	Standby Gas Treatment System Drawdown Time Calculation	1
3.9.1	SGTS Infiltration Due to Pipe Breaks	2
XC-Q1111-98017	LOCA Dose Analysis with Revised Source Term	1

NUMBER	DESCRIPTION	REVISION
MC-Q1P41-97020	Determination of Minimum Allowable SSW Flows (LOCA Lineup) to Safety-Related Heat Exchangers	4
MC-Q1E12-93008	Residual Heat Removal System (E12) Hydraulic Analysis	1
1.1.53-Q, and Supplement 1	ECCS Pumps NPSH Calculation	11/20/97

Drawings

NUMBER	DESCRIPTION	REVISION
M-1091	P & I Diagram Combustible Gas Control Systems	32
E-1160-049	Nuclear Steam Supply Shutoff Radwaste System Trip Logic Valves Unit 1	9
E-1253-006	Schematic Diagram T41 Auxiliary Building Ventilation System Auxiliary Building Ventilation System Isolation Valve F007 Unit 1	7
E-1254-001	Schematic Diagram T42 Fuel Handling Area Ventilation System Isolation Valve F004 Unit 1	6
E-1254-002	Schematic Diagram T42 Fuel Handling Area Ventilation System Isolation Valve F011 Unit 1	7
E-1257-001	T-48 Schematic Diagram Standby Gas Treatment System A Trip Circuit Unit 1	7
E-1257-002	T-48 Schematic Diagram Standby Gas Treatment System Charcoal Filter Train D001A Unit 1	7
E-1257-003	T-48 Schematic Diagram Standby Gas Treatment System Inlet Valve F023 Unit 1	7
E-1257-015	T-48 Schematic Diagram Standby Gas Treatment System Filter Train Heater 0001A Unit 1	11
E-1257-023	T-48 Schematic Diagram Standby Gas Treatment System Flow Control Damper F001-A Unit 1	7

NUMBER	DESCRIPTION	REVISION
E-1257-024	T-48 Schematic Diagram Standby Gas Treatment System Flow Control Damper F012-B Unit 1	8
E-1257-003	T-48 Schematic Diagram Standby Gas Treatment System Inlet Valve F023 Unit 1	7
M-1102A	Process & Instrument Diagram Standby Gas Treatment System Unit 1	22
M-1102B	Process & Instrument Diagram Standby Gas Treatment System Unit 1	6
SFD-1102	System Flow Diagram Standby Gas Treatment System Unit 1	3
C-1045A	Unit 1 Containment Concrete & Misc Steel Plan at EL 161'-10" and EL 170'-0"	8
C-1053C/D	Unit 1 Containment Concrete-Intermediate Wall, Elevations to 210'-10"	6/8

Miscellaneous Documents

NUMBER	DESCRIPTION	REVISION
LDC No. 2001-038	Change to Tech Spec Bases B 3.6.3.3 and UFSAR Sections 1.2.2.4.9.4 and 6.2.5.2.1	0
MP&L Letter AECM-83/0338	Transmittal of Proposed Changes to Grand Gulf Technical Specifications	6/14/83
NRC Letter	Amendment No. 8 to Facility Operating License No. NPF-13 - Grand Gulf Nuclear Station, Unit 1	8/8/83
NPF-29	Grand Gulf Station Facility Operating License	Amend. 158
Engineering Report No. GGNS-02-0006	Engineering Report for Cycle 13 Reload Summary	0
USNRC Letter No. GNRI-95/00044	Issuance of Amendment No. 120 to Facility Operating License No. NPF-29 - Grand Gulf Nuclear Station, Unit 1 (TAC No. M88101)	2/21/95

Miscellaneous Documents

NUMBER	DESCRIPTION	REVISION
Training Manual GLP-OPS-T4801	Standby Gas Treatment System (SGTS) - T48	3
9645-M-632.0	Bechtel Technical Specification for Standby Gas Treatment System for Mississippi Power and Light Company Grand Gulf Nuclear Station Units 1 and 2 Grand Gulf, Mississippi	15
Assessment Report	Evaluation of GGNS 10CFR50.59 Changes, Tests, or Experiments Program	12/30/03
Operations Training Lesson Plan, GLP-OPS-E1200	Residual Heat Removal System-E12	00
Plant Operations Manual, 02-S-01-2	Control and Use Of Operations Section Directives	40
GLP-OPS-E1200	Residual Heat Removal (RHR) System-E12	00
GGNS-SDC-E61	Combustible Gas Control System (E61)	1
SDC-T48	Secondary Containment and Standby Gas Treatment System (T48)	1
Generic Letter 96-06 and Supplement 1	Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions	9/30/96 and 11/13/97
Engineering Report GGNS-97-0002	Generic Letter 96-06 Evaluation of Drywell and Containment Penetrations and Safety Related Piping	1

Condition Reports

CR-GGN-1997-0403	CR-GGN-2001-1829	CR-GGN-2002-02355
CR-GGN-2004-0307	CR-GGN-2001-1884	CR-GGN-2003-00017
CR-GGN-2001-00116	CR-GGN-2002-01280	CR-GGN-2003-02822
CR-GGN-2001-01412	CR-GGN-2002-01386	CR-GGN-2003-03236
CR-GGN-2004-00185	CR-GGN-1995-00041	CR-GGN-2003-00940
CR-GGN-2004-00305	CR-GGN-1995-00089	CR-GGN-2004-00085
CR-GGN-1998-00995	CR-GGN–2003-03328	CR-GGN-2004-00123
CR-GGN-2000-0538	CR-GGN-2003-03372,	CR-GGN-2003-01240
CR-GGN-2001-01681	CR-GGN-2003-03373,	CR-GGN-2003-01744
CR-GGN-2001-00490	CR-GGN-2003-03490	CR-GGN–2003-02922
CR-GGN-2001-0364	CR-GGN-2002-01754	CR-GGN-1995-00397
CR-GGN-2001-0854	CR-GGN-2002-01936	CR-GGN-1997-00332
CR-GGN-2001-01011	CR-GGN-2002-01954	CR-GGN-1998-00392
CR-GGN-2001-1785	CR-GGN-2002-01960	CR-GGN-1999-01640
CR-GGN-2003-00226	CR-GGN-2002-02106	CR-GGN-1999-01939
CR-GGN–2003-00376	CR-GGN-2002-01936	CR-GGN-2000-00276
CR-GGN-2001-01019	CR-GGN-2002-02237	CR-GGN-2000-01258
CR-GGN-2003-00600	CR-GGN-2002-02246	CR-GGN-1995-00197
CR-GGN–2003-00625	CR-GGN-2003-00854	CR-GGN-1995-00221
CR-GGN-2004-00289	CR-GGN-2004-00301	CR-GGN-2001-00955
CR-GGN-2001-01216	CR-GGN-2002-01493	CR-GGN-2003-01340
CR-GGN-2003-02378	CR-GGN-1999-01147	CR-GGN-1999-01256

Procedures

NUMBER	DESCRIPTION	REVISION
04-1-01-E61-1	System Operating Instruction Combustible Gas Control System	39
05-S-01-EP-2	Emergency Procedure - RPV Control	34
EP-2 Flowchart	Emergency Procedure Flowchart - RPV Control	4/24/01
05-S-01-EP-3	Emergency Procedure - Containment Control	26
EP-3 Flowchart	Emergency Procedure Flowchart - Containment Control	12/17/98
05-S-01-SAP-1	Severe Accident Procedure - Severe Accident	3
SAP-1 Flowchart	Core Debis Has Breached The RPV	12/9/02
SAP-2 Flowchart	RPV Water Level Can Be Restored and Maintained Above -167 in	12/9/02

NUMBER	DESCRIPTION	REVISION
SAP-3 Flowchart	RPV Water Level Can Be Maintained Above -317 in	12/9/02
SAP-4 Flowchart	RPV Injection Can Be Restored and Maintained Greater Than MDRIR	12/9/02
SAP-5 Flowchart	RPV Injection Cannot Be Restored and Maintained Greater Than MDRIR- Containment Pressure Is Within PSP	12/9/02
SAP-6 Flowchart	RPV Injection Cannot Be Restored and MaintainedGreater Than MDRIR- Containment Pressure Is Not Within PSP	12/9/02
06-OP-1E61-R-0005	Primary Containment Hydrogen Recombiner 'A' Heatup Test	102
06-OP-1E61-R-0006	Primary Containment Hydrogen Recombiner 'B'Heatup Test	102
06-OP-1E61-R-0009-01	Hydrogen Igniter System Heatup Test (System A)	103
06-OP-1E61-R-0009-02	Hydrogen Igniter System Heatup Test (System B)	103
06-OP-1E61-R-0009-03	Hydrogen Igniter System Heatup Test (System A & B)	103
06-OP-1E61-R-0009-04	Hydrogen Igniter System Heatup Test (System A & B)	102
06-OP-1E61-R-0003	Drywell Purge System Operability	106
06-IC-1E61-Q-1004-01	Containment Hydrogen Analyzer (PAM) Calibration -Channel A	102
06-IC-1E61-Q-1004-02	Containment Hydrogen Analyzer (PAM) Calibration - Channel B	102
06-IC-1E61-Q-1004-03	Drywell Hydrogen Analyzer (PAM) Calibration - Channel A	102

NUMBER	DESCRIPTION	REVISION
06-IC-1E61-Q-1004-04	Drywell Hydrogen Analyzer (PAM) Calibration - Channel B	102
06-OP-1E61-M-0001	Post-LOCA Drywell Vacuum Breaker Operability	102
06-OP-1E61-Q-0003-01	Drywell Purge System ‘A’ Operability	109
06-OP-1E61-Q-0003-02	Drywell Purge System ‘B’ Operability	109
06-IC-1E61-M-1002-02	Containment/Drywell Differential Pressure Functional Test Channel B	101
06-IC-1E61-M-1002-04	Containment/Drywell Differential Pressure FunctionalTest Channel D	101
06-IC-1E61-M-1002-05	Containment/Drywell Differential Pressure FunctionalTest Channel E	101
06-IC-1E61-M-1002-05	Containment/Drywell Differential Pressure FunctionalTest Channel E	101
06-IC-1E61-M-1002-06	Containment/Drywell Differential Pressure Functional Test Channel F	101
06-IC-1E61-M-1002-07	Containment/Drywell Differential Pressure FunctionalTest Channel G	101
06-IC-1E61-M-1002-08	Containment/Drywell Differential Pressure Functional Test Channel H	101
01-S-06-2	Conduct of Operations	117
NPEAP 318	Design Engineering Criteria	6
POMSOI 04-1-01-T48-1	Standby Gas Treatment	29
E-1254-003	Schematic Diagram T42 Fuel Handling Area Ventilation System Isolation Valve F019 Unit 1	5
POMSR 06-ME-1T48-R-0005	In-place Testing of Standby Gas Treatment Filtration System	104

NUMBER	DESCRIPTION	REVISION
POMSR 06-OP-1T48-Q-0002	Standby Gas Treatment System A Valve Test	102
POMSR 06-OP-1T48-R-0002	Surveillance Procedure Standby Gas Treatment A Logic and Vacuum Test	107
SOI 04-1-01-E12-2	Shutdown Cooling and Alternate Decay Heat Removal Operation	100
SOI 04-1-01-E12-1	Residual Heat Removal System	122
01-S-07-39	Inservice Testing	103
17-S-05-1	Performance and System Engineering Instruction - Local Leak Rate Test Program	106
07-S-14-395	Safety and Relief Valve Program-Safety Related	6

Engineering Requests

ER-GG-2002-0095-000
ER-GG-02002-0095-001
ER-GG-02002-0123-000
ER-GG-91-6166
ER-GG-97-0022-00, -01, -02
ER-GG-2001-0410-000
ER-GG-2000-0083-000

Surveillance Procedures

06-OP-1000-D-0001
06-OP-1E12-M-0001
06-OP-1E12-M-0001
06-OP-1E12-Q-0023
06-OP-1E12-R-0023
06-IC-1M71-R-0003
06-OP-1000-D-0001
06-OP-1000-D-0001
06-OP-1E12-M-0002
06-OP-1E12-M-0023
06-ME-1000-R-0003

Inservice Test Program Documents

CEP-IST-1, “Inservice Testing Bases Document,” Revision 3

CEP-IST-2, Inservice Testing Plan,” Revision 3

CEP-IST-3, “Inservice Testing Cross-Reference Document,” Revision 1

Plant Operations Manuals

06-ME-1M61-V-0001, “Surveillance Procedure - Local Leak Rate Test Low Flow Air,” Revision 107.

06-OP-1E12-Q-0005, “Surveillance Procedure - LPCI/RHR Subsystem A MOV Functional Test,” Revision 104.

06-OP-1E12-Q-0006, , “Surveillance Procedure - LPCI/RHR Subsystem B MOV Functional Test,” Revision 105.

06-OP-1E12-Q-0023, “Surveillance Procedure - LPCI/RHR Subsystem A Quarterly Functional Test,” Revision 112.

06-OP-1E12-Q-0024, “Surveillance Procedure - LPCI/RHR Subsystem B Quarterly Functional Test,” Revision 108.

06-OP-1T48-Q-0002, “Surveillance Procedure - Standby Gas Treatment System A Valve Test,” Revision 102.

06-OP-1T48-Q-0003, “Surveillance Procedure - Standby Gas Treatment System B Valve Test,” Revision 102.

06-OP-1E12-C-0015, “Surveillance Procedure - LPCI B Shutdown Valve Test,” Revision 105.

06-OP-1E12-C-0014, “Surveillance Procedure - LPCI A Shutdown Valve Test,” Revision 104.

06-OP-1E12-C-0013, “Surveillance Procedure - RHR B Shutdown Cooling Mode Valve Test,” Revision 104.

06-OP-1E12-C-0012, “Surveillance Procedure - RHR A Shutdown Cooling Mode Valve Test,” Revision 105.

Valves Reviewed:

RHR System

1E12F042A	1E12F009	1E12F003A	1E12F024A
1E12F042B	1E12F008	1E12F003B	1E12F024B
1E12F006A	1E12F053A	1E12F004A	1E12F028A
1E12F006B	1E12F053B	1E12F004B	1E12F028B
1E12F027B	1E12F027A		

Standby Gas Treatment System

T48F005	T48F023
T48F025	T48F024
T48F026	

Pumps Reviewed:

1E12C002A - RHR/LPCI Pump C
1E12C002B - RHR/LPCI Pump B
1E12C003A - RHR Loop A Jockey Pump
1E12C003B - RHR Loop B Jockey Pump

Preventive Maintenance Records

“A” Seal Cooler, “Perform Thermal Performance Test for the RHR “C” Pump Seal Cooler,” Task 28140

1E12B001B/2B, “Perform Thermal Performance Test for the RHR “B” Pump Seal Cooler,” Task 28123

“A” Jockey Pump, “Clean, inspect and lube motor. Clean and inspect motor breaker,” Task 3757

“B” Jockey Pump, “Perform pump coupling maintenance and change oil. Vibration Engineer to perform testing six weeks prior to task schedule date to allow development of work scope,” Task 6268

“A” Motor, “Clean, inspect and meg motor Change Motor Bearing Oil,” Task 3453

“A” Motor, “Replace upper and lower oil level sight glass O-rings,” Task 24303

“A” Motor, “Perform 10 year motor inspection,” Task 3452

“A” Pump, “Replace/rework mechanical seal,” Task 28738

“B” Pump, “Replace/rework mechanical seal,” Task 28739

“B” Motor, “Perform 10 year motor inspection,” Task 3742

“B” Motor, “Calibration of velocity transducers on 1E12C002B Motor,” Task 24928

Work Orders

00162085	00209637	50326558 01	50488399 01
00164319	50338362 01	50767002 05	50571424 01
00183313	50339439 01	50830772	50572236 01
00182214	001752220	50964800	50573467 01
00209636	50311008	50964801	001752221

Maintenance Action Items

MAI# 275010	MAI# 306648	MAI# 318493
MAI# 276030	MAI# 308059	MAI# 313914
MAI# 286566		

Safety Evaluations

SE-2001-0028	SE 2002-0006	SE 2003-0001
SE 2002-0002	SE 2002-0007, Revision 2	SE 2003-0002
SE 2002-0005	SE 2002-0008, Revision 1	

Safety Evaluation Sceenings

Calculation XC-Q1J11-98017, Revision 1
Calculation 3.9.12, Revision 2
Engineering Report GGNS-99-0026, Revision 0
Procedure 01-S-02-3, Revision 107
Procedure 04-1-01-T48-1, Revision 29
Procedure 06-ME–1T48-R-0005, Revision 104
Procedure 06-OP-1E12-Q-0023, Revision 112
Procedure 06-OP-1E12-Q-0024, Revision 108
Procedure 06-OP-1T48-R-0001, Revision 105
Procedure 318, Revision 6
Procedure 17-S05-1, Revision 106
Software Check+/CTP 2.0.1
Software SCR-GGN-2001-83
Software ER-GG-2000-0859-002