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

April 7, 2003

William A. Eaton, Vice President
Operations - Grand Gulf Nuclear Station
Entergy Operations, Inc.
P.O. Box 756
Port Gibson, Mississippi 39150

SUBJECT: GRAND GULF NUCLEAR STATION - NRC INSPECTION REPORT 50-416/02-06

Dear Mr. Eaton:

On March 29, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Grand Gulf Nuclear Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on April 2, 2003, 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. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

This report documents two findings of very low safety significance (Green) which 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 two findings as noncited violations (NCVs) consistent with Section VI.A 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 Grand Gulf Nuclear Station facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, 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/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

William D. Johnson, Chief
Project Branch A
Division of Reactor Projects

Docket: 50-416
License: NPF-29

Enclosure:
NRC Inspection Report 50-416/02-06
w/attachment: Supplemental Information

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket:	50-416
License:	NPF-29
Report No:	50-416/02-06
Licensee:	Entergy Operations, Inc.
Facility:	Grand Gulf Nuclear Station
Location:	Waterloo Road Port Gibson, Mississippi 39150
Dates:	December 29, 2002, through March 29, 2003
Inspectors:	T. L. Hoeg, Senior Resident Inspector R. W. Deese, Resident Inspector R. P. Mullikin, Senior Reactor Inspector P. A. Goldberg, Senior Reactor Inspector
Approved By:	W. D. Johnson, Chief, Project Branch A Division of Reactor Projects
Attachment:	Supplemental Information

SUMMARY OF FINDINGS

IR 05000416/2002-006; Entergy Operations, Inc., 12/29/02 - 03/29/03; Grand Gulf Nuclear Station; Adverse Weather Protection; Access Controls.

The report covered a 13-week period of inspection by resident inspectors and regional reactor safety inspectors. Two Green noncited violations were identified. The significance of any findings are indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process." Findings for which the SDP 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. Inspector Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. A noncited violation of Technical Specification 5.4.1 was identified for failure of Grand Gulf Nuclear Station (GGNS) to provide an adequate procedure for establishing freeze protection measures in the form of heat tracing to fire hose stations located in the emergency diesel generator breezeway. On January 24, 2003, during prolonged freezing temperatures, two fire hose station's heat tracing were found unplugged and de-energized. This issue was documented in the licensee's corrective action program as Condition Report CR-GGN-2003-0227.

  This finding was evaluated using the Significance Determination Process and determined to be of very low safety significance. The finding is greater than minor because it affected the mitigating systems cornerstone objective as described in NRC Manual Chapter 0612 involving protection against external factors such as fire. The finding was of very low safety significance because, although the fire hose station's heat trace was not energized, it had not frozen and was restored in a timely manner due to inspector intervention (Section 1RO1).

Cornerstone: Physical Protection

- Green. A noncited violation of Section 2.E of the GGNS facility operating license was identified for failure of GGNS to comply with Section 6.2, "Access Controls," of the GGNS Security Plan. On February 15, 2003, a GGNS employee, performing access control escort duties, failed to control the access of a visiting contractor who was not authorized by GGNS to enter or remain in the protected area without an escort. This issue was documented in the GGNS corrective action program as Condition Report CR-GGN-2003-0544.

  This finding was evaluated using the Significance Determination Process and determined to be of very low safety significance. The finding is greater than minor because it affected the physical protection cornerstone objective as described in NRC Manual Chapter 0612 involving unescorted visitor access controls. The finding was of very low safety significance because, although the unescorted visitor was found alone, the individual had no intentions of malevolent acts and there had not been two similar findings in the previous four quarters (Section 3PP2).

B. Licensee Identified Findings

A violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and its corrective action tracking number are listed in Section 4OA7 of this report.

Report Details

Summary of Plant Status: The Grand Gulf Nuclear Station (GGNS) began this inspection period at 100 percent reactor power. The plant was operated at or near 100 percent rated thermal power except during periodic planned power reductions for monthly control rod exercising and periodic control rod pattern adjustments, except as follows: On January 19, reactor power was lowered to 95 percent to perform troubleshooting on the Train A reactor coolant recirculation valve hydraulic power unit. The plant was returned to full power on January 19 and remained there until January 30, when a manual scram was initiated due to a loss of feedwater. The plant was returned to full power on February 2 and remained there until February 26, when power was lowered to 85 percent to perform troubleshooting of the turbine electrohydraulic control system. The plant was returned to full power on February 26 and remained there throughout this inspection period.

1. REACTOR SAFETY

Initiating Events, Mitigating Systems, Barrier Integrity [Reactor - R]

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

Prior to a forecasted extended freezing period, the inspectors reviewed GGNS readiness to operate under freezing conditions. The inspectors reviewed GGNS Instruction 04-1-03-A30-1, "Cold Weather Protection," Revision 14, to determine if plant personnel had made the required preparations for the expected prolonged freezing temperatures. The inspectors performed a detailed review of susceptible components in the emergency diesel generator building, standby service water pump rooms, and fire pump rooms to ensure they were protected from freezing temperatures.

b. Findings

Introduction

The inspectors identified a noncited violation of Technical Specification (TS) 5.4.1 for failure to provide an adequate procedure for establishing freeze protection measures in the form of heat tracing to fire hose stations located in the emergency diesel generator breezeway during prolonged freezing periods. The finding had a very low safety significance (Green).

Description

In November of 2002, prior to the onset of cold weather, GGNS personnel had taken actions to ensure cold weather protection measures were in place per Operations Manual Instruction 04-1-03-A30-1. On January 23, 2003, the weather forecast for the Port Gibson, Mississippi, area was calling for subfreezing temperatures lasting several days.

On January 24, 2003, the inspectors identified fire hose Stations 66A and 66B located in the emergency diesel generator building breezeway as having their heat trace power

supplies unplugged. The temperature in the location of fire hose stations was approximately 40°F. The inspectors brought this finding to the attention of the Shift Manager, who dispatched an operator to energize the subject heat trace. The heat tracing was energized and the fire hose stations did not freeze.

Analysis

The finding was more than minor because it affected the mitigating systems cornerstone objective as described in NRC Manual Chapter 0612 involving protection against external factors such as fire. Using Phase I of the SDP in Manual Chapter 609, Appendix F, the inspectors determined that the finding did not actually impair or degrade the function of the fire hose stations in that they did not freeze and therefore screened out as very low safety significance. In this determination, the inspectors assumed the fire hose stations did not freeze because the heat trace was energized before the onset of the prolonged freezing temperatures due to inspector intervention.

Enforcement

The inspectors determined that failure to ensure all required freeze protection heat tracing circuits were operating was a violation of TS 5.4.1. TS 5.4.1 requires written procedures be established for procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Contrary to this requirement, Operations Manual Instruction 04-1-03-A30-1 did not provide instruction to ensure the fire hose station heat tracing was energized. This violation is being treated as a noncited violation (NCV 05000416/2002-006-01) because of its very low safety significance and because the licensee included it in their corrective action program as Condition Report CR-GGN-2003-0227.

1R04 Equipment Alignment

.1 Partial System Walkdowns (71111.04)

a. Inspection Scope

The inspectors performed partial system walkdown inspections and reviews of four systems important to reactor safety in order to verify the operability of the systems. The inspectors reviewed system operating instructions, system valve and breaker lineups, operator logs, and system control room indications. The inspectors also verified that valves, breakers, and control circuits were in their required positions for operability. The following systems were inspected:

- Residual heat removal system Train C
- Divisions I, II, and III DC electrical power subsystems
- Standby service water system Train B
- Reactor core isolation cooling system

b. Findings

No findings of significance were identified.

.2 Semiannual Complete System Walkdown (71111.04S)

a. Inspection Scope

On February 13, 2002, the inspectors performed a complete walkdown of the plant air system, including the instrument air compressors and their associated controls located in the water treatment facility, to determine if there were any discrepancies between the actual equipment alignment versus what was procedurally required. During the walkdown, System Operating Instruction 04-1-01-P51-1, "Plant Air System," Revision 0, was used by the inspectors to verify that major system components were correctly labeled and aligned. The inspectors also reviewed open condition reports on the system for any deficiencies that could affect the ability of the system to perform its design function. Documentation associated with control room deficiencies, temporary modifications, operator workarounds, and items tracked by plant engineering personnel were also reviewed to assess their collective impact on system operation.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors reviewed area fire plans and performed walkdowns of six plant areas to assess the materiel condition and operational status of fire detection, suppression systems and equipment; fire barriers; and the control of transient combustibles. Specific risk-significant plant areas included:

- Low pressure core spray pump Room 1A115
- Division I switchgear Room 1A309
- Secondary alarm station Room OC704
- Containment cooling equipment Room 1A405
- Unit 2, Division I switchgear Room OC214
- Division II switchgear Room 1A207

b. Findings

No findings of significance were identified.

1R06 Flood Protection (71111.06)

a. Inspection Scope

During the week of March 24, the inspectors reviewed GGNS's external flooding protection features and general flood protection measures associated with owner controlled area culvert drainage as required in Technical Requirements Manual Specification 6.7.5. The inspectors performed a visual inspection of culverts, storm drains, and drainage piping in the owner controlled area and the protected area for proper slope and nonblockage.

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 reviewed the licensee's testing and cleaning methodology for the residual heat removal system heat exchangers and pump room coolers for residual heat removal, high pressure core spray, and low pressure core spray. 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 the 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 inspect and clean were consistent with industry standards, and as-found results were appropriately dispositioned such that the final condition was acceptable.

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 and that 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 residual heat removal 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 residual heat removal system 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 licensee personnel had entered significant heat exchanger/heat sink performance problems into the corrective action program.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11Q)

a. Inspection Scope

On February 6, 2003, the inspectors observed two scenarios during one session of licensed operator requalification training activities in the simulator to assess the training staff's effectiveness in conducting the requalification program and to verify that licensed individuals received the appropriate level of training required to maintain their licenses. The observed training was controlled by licensee Procedure GG-1-SMS-LOR-00178, "EOP Execution Practice Scenarios," Revision 4. The first simulated training scenario observed was a "Feedwater Line Break in the Drywell." The second simulated training scenario observed was a "Loss of Coolant Accident with Loss of Offsite Power Forcing Emergency Depressurization at the Top of Active Fuel." The inspectors also observed the posttraining critiques conducted by the training instructors and the shift manager to verify that weak areas observed during simulator operations were appropriately identified for additional training.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

.1 Resident Inspector Baseline Quarterly Reviews (71111.12Q)

a. Inspection Scope

The inspectors reviewed performance-based problems involving three selected in-scope structures, systems, or components (SSCs) to assess the effectiveness of the Maintenance Rule Program. Reviews focused on: (1) proper Maintenance Rule scoping in accordance with 10 CFR 50.65; (2) characterization of failed SSCs; (3) safety significance classifications; (4) 10 CFR 50.65 (a)(1) and (a)(2) classifications; and (5) the appropriateness of performance criteria for SSCs classified as (a)(2) and goals and corrective actions for SSCs classified as (a)(1). The inspectors reviewed the system health reports and system functional failures for the last 2 years. The following systems were reviewed:

- Division III emergency diesel generator (P81)
- High pressure core spray system (E22)
- Neutron monitoring system (C51)

b. Findings

No findings of significance were identified.

.2 Periodic Evaluation Reviews (71111.12B)

a. Inspection Scope

The inspectors reviewed the licensee's report documenting the performance of the last two maintenance rule periodic effectiveness assessments. The two periodic assessments covered the periods from January 1 through December 31, 2000, and January 1 through December 31, 2001.

The inspectors reviewed the program for the monitoring of risk-significant functions associated with SSCs using reliability and unavailability. The inspectors reviewed six SSCs/functions that had suffered degraded performance during the previous 3 years. The performance monitoring of nonrisk-significant functions using plant level criteria was also reviewed.

The inspectors reviewed the conclusions reached by the licensee with regard to the balance of reliability and unavailability for specific maintenance rule functions. This review was conducted by examining the evaluation of all risk-significant functions that had exceeded performance criteria during the evaluation period.

The inspectors also examined the licensee’s evaluation of program activities associated with the placement of maintenance rule program functions in Categories (a)(1) or (a)(2). Additionally, the inspectors reviewed the periodic evaluation conclusions reached by

licensee personnel for the following systems: standby liquid control, instrument air, Divisions 1 and 2 diesel generators, Division 3 diesel generator, 4160-volt switchgear, and diesel generator building ventilation.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors evaluated the use of the corrective action system within the maintenance rule program for issues associated with risk significant systems. The review was accomplished by the examination of a sample of corrective action documents associated with systems which are, or had been, in Maintenance Rule Category (a)(1), including recovery plans for improving the system performance. The purpose of the review was to establish that the corrective action program was entered at the appropriate threshold for the purpose of:

- Implementation of the corrective action process when a performance criterion was exceeded
- Correction of performance-related issues or conditions identified during the periodic evaluation
- Correction of generic issues or conditions identified during programmatic assessments, audits, or surveillances.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

Throughout the inspection period, the inspectors reviewed weekly and daily work schedules to determine when risk-significant activities were scheduled. The inspectors discussed six selected activities with operations and work control personnel regarding risk evaluations and overall plant configuration control. The inspectors discussed emergent work issues with work control center personnel and reviewed the prioritization of scheduled activities. The inspectors verified the performance of plant risk assessments related to planned and emergent maintenance activities as required by 10 CFR 50.65(a)(4) and plant Procedure 01-S-18-6, “Risk Assessment of Maintenance Activities,” Revision 1. Specific maintenance items reviewed during this period included:

- MAI 318852, Low pressure core spray system mechanical maintenance
- MAI 323267, Reactor core isolation cooling system mechanical maintenance
- MAI 327473, Train B standby service water system electrical maintenance
- MAI 325584, Standby service water Valve 1P41F0237 inspection
- MAI 329253, Battery Charger 1A4 electrical maintenance
- MAI 330178, Motor-driven fire pump electrical maintenance

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Events (71111.14)

.1 Reactor Scram

a. Inspection Scope

On January 30, 2003, the inspectors observed control room personnel performance while responding to a loss of feedwater resulting in a reactor scram. The inspectors reviewed operator logs, plant computer data, control room strip chart recorders, procedural compliance, control room communications, 10 CFR 50.72 reporting requirements, the posttrip review analysis report, and associated corrective actions.

b. Findings

No findings of significance were identified.

.2 Reactor Startup

a. Inspection Scope

On January 31, 2003, the inspectors observed the licensed operators performing a reactor startup while in Mode 2 of operations. The inspectors observed the control room reactor operator sequentially withdrawing control rods to obtain criticality. The inspectors reviewed operator logs, reactor physics calculations, control rod pull sequence sheets, nuclear instrumentation data, operator procedural compliance, and reactor plant response to the evolution.

b. Findings

No findings of significance were identified.

.3 Reactor Downpower and Turbine Control Valve Troubleshooting

a. Inspection Scope

On February 26, 2003, the inspectors observed operations personnel perform a planned nonroutine plant downpower to 85 percent rated thermal power in order to allow

troubleshooting of the turbine control valves. The inspectors observed control room shift personnel performing the pre-evolution brief, establishing prerequisites, lowering reactor recirculation flow, and operator procedural compliance and response for the evolution, and the expected results were obtained.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors selected four operability evaluations conducted by GGNS personnel during the report period involving risk-significant SSCs. The inspectors evaluated the technical adequacy of the operability determinations, determined whether appropriate compensatory measures were implemented, and determined whether GGNS personnel considered all other pre-existing conditions, as applicable. Additionally, the inspectors evaluated the adequacy of the GGNS's problem identification and resolution program as it applied to operability evaluations. Specific operability evaluations reviewed are listed below.

- CR-GGNS-2003-0170, High pressure core spray system Valve 1E22 F035
- CR-GGNS-2003-0211, Low pressure core spray system room cooler
- CR-GGNS-2003-0313, Scram discharge volume Valve 1C11 F180
- CR-GGNS-2003-0531, Train B standby service water system basin hangers

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17A)

a. Inspection Scope

The inspectors selected a permanent plant structural modification completed on standby service water (SSW) system Basin B pipe hanger supports. The modification repaired corroded pipe hanger support strut assemblies with use of bolted connections vice welded connections of strut support plates. The inspectors reviewed Design Change Package ER-2003-0068 in order to verify structural integrity was acceptable for: (1) accident conditions; (2) structural effects upon attachment points; and (3) effect on seismic evaluations. The inspectors also verified the modification did not degrade the design bases, licensing basis, or performance capability of the subject SSW piping.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed postmaintenance test procedures and associated testing activities for six selected risk-significant mitigating systems. In each case, the associated work orders and test procedures were reviewed against the attributes in Inspection Procedure 71111, Attachment 19, to determine the scope of the maintenance activity and determine if the testing was adequate to verify equipment operability. The reviewed activities were:

- MAI 326052, Unit 1 instrument air compressor
- MAI 327437, Division II drywell purge compressor
- MAI 318950, Relief Valve 1P41F097B
- MAI 326122, Division III emergency diesel generator fuel oil storage tank
- MAI316104, High pressure core spray diesel generator maintenance
- MAI 329111, Motor-driven fire pump

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed performance of surveillance test procedures and reviewed test data of six selected risk-significant SSCs to assess whether the SSCs satisfied the TS, the Updated Final Safety Analysis Report, the Technical Requirements Manual, and licensee procedural requirements and to determine if the testing appropriately demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions. The following tests were inspected:

- 06-OP-1E12-Q-0025, “Residual Heat Removal Subsystem C Quarterly Functional Test,” Revision 108

- 06-OP-1000-D-001, “Daily Control Room Instrument Channel Checks,” Revision 116

- 06-OP-1C11-1-013, “Daily Control Rod Accumulator Operability Checks,” Revision 100

- 06-OP-1C11-Q-009, “Scram Discharge Volume Vent and Drain Valves Operability Test,” Revision 104

- 06-OP-1R20-W-001, “AC and DC Weekly Verifications,” Revision 104

- 04-OP-1P81-M-001, “HPCS Monthly Operability Test,” Revision 57

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the temporary alteration listed below to assess the following attributes: (1) the adequacy of the safety evaluation; (2) the consistency of the installation with the modification documentation; (3) the updating of drawings and procedures, as applicable; and (4) the adequacy of the postinstallation testing.

- 2002-0023, Condenser hotwell level controller logic adjustment

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Physical Protection [PP]

3PP2 Access Control (71130.02)

a. Inspection Scope

The inspectors observed GGNS activities associated with escorted visitor access controls. The licensee personnel's activities were evaluated against the requirements of Administrative Procedure 01-S-11-10, “GGNS Employee's Security Responsibilities” and Entergy Training Handbook, ELP-GET-PAT01.10, “Plant Access Training.”

b. Findings

Introduction

The inspectors identified a noncited violation of Section 2.E of the GGNS facility operating license having very low safety significance (Green). On February 15, 2003, GGNS personnel failed to comply with Section 6.2, “Access Controls,” of the GGNS Security Plan by failing to control the access of a visiting contractor who was not authorized to enter or remain in the protected area without an escort.

Description

On February 15, 2003, contracted personnel were performing underwater visual inspections of the SSW system Train B piping supports in the cooling tower water basin located inside the site's protected area. The visiting contractors (underwater divers) did not have unescorted visitor access.

While performing routine baseline inspections in and around the SSW basins, the inspectors found a diver alone in a temporary shelter erected in the protected area for inspections of the SSW basins. The individual was wearing and properly displaying a temporary visitor's badge used for identification of an individual requiring an escort inside the protected area. When the inspector confronted the individual and asked him where his escort was, he did not know. Within a few minutes, the escort had returned and resumed positive control of the visitor. The escort had allowed the diver to remain alone unescorted in the temporary shelter while he escorted another diver to the restroom. This practice was contrary to the requirements of Section 6.2 of the GGNS Security Plan, which required escorts to maintain continuous visual contact and control of the visitor at all times.

Analysis

The finding is more than minor because it affected the physical protection cornerstone objective as described in NRC Manual Chapter 0612 involving unescorted visitor access controls as required in the GGNS Security Plan. Using the Physical Protection Significance Determination Process, the inspectors determined the finding was of very low safety significance because, although the unescorted visitor was found alone, the individual had no intentions of malevolent acts and there had not been two similar findings in the previous four quarters.

Enforcement

The inspectors determined that failure to comply with Section 6.2 of the GGNS Security Plan was a violation of Section 2.E of the GGNS facility operating license which states, in part, that the licensee shall fully implement and maintain in effect all provisions of the Commission approved physical security plan. This violation is being treated as a noncited violation (NCV 05000416/2002-006-02) because of its very low safety significance and because licensee personnel included it in their corrective action program as Condition Report CR-GGN-2003-0544.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors verified the accuracy and completeness of the data used to calculate and report performance indicator information for three indicators for Calendar Year 2002. The inspectors used Nuclear Energy Institute 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, as guidance and interviewed licensee personnel responsible for compiling the information.

- Unplanned scrams per 7,000 critical hours
- Scrams with a loss of normal heat removal
- Reactor coolant system leakage

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

a. Inspection Scope

The inspectors assessed the licensee's problem identification and resolution efforts associated with the failure of Train B SSW discharge isolation Valve P41F001B on February 1, 2003. The inspectors reviewed the licensee personnel's evaluations for operability and reportability of the issue and determined that those corrective actions were completed in a manner commensurate with the safety significance of the issue and whether a proper extent of condition was determined.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On February 13, 2003, the results of the maintenance rule and heat sink performance inspections were presented to Mr. Drew Bottemiller, Licensing Manager, and other members of licensee management.

On April 2, 2003, the resident inspectors presented the inspection results to Mr. Jerry Roberts, Director of Nuclear Safety Assurance, and other members of his staff.

The inspectors asked the licensee representatives whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee-Identified Violations

The following violation of very low safety significance (Green) was identified by licensee personnel and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a noncited violation.

10 CFR 20.1902 (b) requires the posting of each high radiation area. On January 8, 2003, licensee personnel removed the required high radiation area signs from the Train B reactor water cleanup room, leaving that high radiation area unposted as described in the licensee's corrective action program in Condition Report CR-GGN-2003-0061. Because the ability to assess dose was not compromised, this violation is not of more than very low significance and is being treated as a noncited violation.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee

C. Abbott, Quality Assurance Supervisor
D. Barfield, Manager, System Engineering
R. Barnes, Manager, Training and Development
R. Benson, Supervisor, Radiation Protection
C. Bottemiller, Manager, Plant Licensing
K. Christian, Superintendent, Mechanical Maintenance
W. Eaton, Vice President, Operations
N. Edney, Supervisor, Radiation Protection
J. Edwards, General Manager, Plant Operations
C. Ellsaesser, Manager, Corrective Action and Assessment
M. Guynn, Manager, Emergency Preparedness
M. Larson, Senior Licensing Specialist
R. Moomaw, Manager, Outage Planning and Scheduling
J. Roberts, Director, Nuclear Safety Assurance
J. Robertson, Manager, Quality Assurance
M. Rohrer, Manager, Maintenance
F. Rosser, Supervisor, Radiation Protection
G. Sparks, Manager, Operations
D. Wiles, Director, Engineering
R. Wilson, Superintendent, Radiation Protection
H. Yeldell, Manager, Design Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000416/2002-006-01	NCV	Failure to provide an adequate procedure for establishing freeze protection measures in the form of heat tracing to fire hose stations located in the emergency diesel generator breezeway (Section 1RO1)
05000416/2002-006-02	NCV	Failure to control the access of a visiting contractor who was not authorized by the licensee to enter or remain in the protected area without an escort (Section 3PP2)

LIST OF DOCUMENTS REVIEWED

Procedures:

Administrative Procedure 01-S-17-22, “Maintenance Rule Program,” Revision 3

Administrative Procedure LI-102, “Corrective Action Process,” Revision 2

Maintenance Rule Desk Top Guide, Revision 1

Condition Reports:

1997-0309	2002-1573	2003-0170	2003-0285
1997-1307	2002-2253	2003-0175	2003-0300
1998-1154	2002-2324	2003-0177	2003-0303
1998-1205	2002-2425	2003-0182	2003-0305
1999-1714	2002-2648	2003-0188	2003-0309
2000-0310	2002-2740	2003-0204	2003-0311
2000-0787	2003-0017	2003-0215	2003-0325
2000-0842	2003-0030	2003-0219	2003-0574
2000-0843	2003-0037	2003-0225	2003-0592
2001-0413	2003-0039	2003-0226	2003-0593
2001-0448	2003-0056	2003-0227	2003-0598
2001-1103	2003-0061	2003-0228	2003-0603
2001-2003	2003-0102	2003-0230	2003-0605
2002-0300	2003-0166	2003-0249	2003-0625
2002-0389	2003-0168	2003-0266	

Maintenance Action Items:

288634	319557	327215	329793
304606	322627	327550	330081
306648	325089	328555	330511
307081	325872	328972	330552
317723	326692	329506	

Other Miscellaneous Documents:

WM-100, “Work Order Generation, Screening, and Classification,” Revision 2

LI-102, “Corrective Action Process,” Revision 2

07-S-14-52, “General Maintenance Instruction ESF Electrical Switchgear Room Cooler Inspection Safety Related,” Revision 7

07-1-34-T46-B001A-2, “Corrective Maintenance Instruction ESF Switchgear Header and Room Cooler Acid Flush,” Revision 4

04-1-03-T46-1, “Equipment Performance Instruction A ESF Switchgear Room Coolers Flow Test,” Revision 16

GGNS-MS-51, “Program Plan for Monitoring and Controlling Microbiologically Influenced Corrosion,” Revision 1

Letter, “Response to Generic Letter 89-13; Service Water System Problems Affecting Safety - Related Equipment,” dated January 29, 1990

Maintenance Rule Self Assessment Report, performed August 6-8, 2001

STI-GG-2003-0002-00, “Manual Testing of HP and LP Turbine Control Valves”

Maintenance Rule Assessment Report, performed July 8-11, 2002

Maintenance Rule Expert Panel Meeting Minutes for January 17, 2000, February 18, 2000, June 6, 2000, August 21, 2000, and December 10, 2002

Maintenance Rule Periodic Assessment from January 1 - December 31, 2000

Quality Assurance Audit of Engineering Programs, dated August 27, 2001

Quality Assurance Surveillance Report QS-2002-GGNS-018, Review of Corrective Actions for System B33 to Change from Maintenance Rule (a)(1) to (a)(2) Status, dated January 3, 2003

System Performance Indicators for Maintenance Rule Systems C41, P53, P75, P81, R21, and X77, dated January 30, 2003

Calculations

MC-Q1P41-97020, “Determination of Minimum Allowable SSW Flows (LOCA Lineup) to Safety Related Heat Exchangers,” Revision 3

MC-Q1T46-95018, “Auxiliary Building Room Temperatures During a LOCA with LOP,” Revision 0

Standard MS-39.0, “Thermal Performance Testing of Safety Related SSW Heat Exchangers,” Revision 1

Drawing E12-B001, “Envelope Heat Exchanger, Residual Heat Removal System,” Revision 1

MC-Q1P41-97035, “SSW Heat Exchanger Thermal Performance Instrument Uncertainty,” Revision 2

MC-Q1P41-97036, “Shell and Tube Heat Exchanger Rating Program,” Revision 0

EC-Q1111-90005, “Qualified Life of the ECCS Pump Motors,” Revision 2

Surveillance Tests

17-S-06-24, “SSW “C” Thermal Performance Data,” March 29, 2001
17-S-06-23, “SSW “B” Thermal Performance Data,” April 10, 2001
17-S-06-22, “SSW “A” Thermal Performance Data,” April 5, 2001
17-S-06-22, “SSW “A” Thermal Performance Data,” May 29, 2001
17-S-06-24, “SSW “C” Thermal Performance Data,” May 11, 2001
07-S-01-205, “Instructions for HPCS Cooler Acid Flush,” May 8, 1998

Engineering Reports

GGNS-89-0028, “Functionality Under High Ambient Conditions,” Revision 1
MNCR 0028-94, “Evaluation of Room Cooler Performance,” dated March 1, 1994
SERI 89/0030, “NPE Review of the Requirements of NRC Generic Letter 89-13,” Revision 0
ER-96-0070-00, “Evaluation of MCNR 028-94,” Revision 1
Engineering Report No. SERI-89/0030, “NPE Review of the Requirements of NRC Generic Letter 89-13,” Revision 0