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

August 23, 2000

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

SUBJECT: NRC'S GRAND GULF NUCLEAR STATION INTEGRATED INSPECTION REPORT NO. 50-416/00-08

Dear Mr. Eaton:

On August 12, 2000, the NRC completed an inspection at the Grand Gulf Nuclear Station facility. The enclosed report presents the results of that inspection. The results of the inspection were discussed with Mr. J. Venable and other members of your staff on August 17, 2000.

The inspection was an examination of activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures 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/NRC/ADAMS/index.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/

Joseph I. Tapia, Chief
Project Branch A
Division of Reactor Projects

Docket No.: 50-416
License No.: NPF-29

Enclosure:
NRC Inspection Report No.
50-416/00-08

cc w/enclosure:
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DRS Director **(ATH)**
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Branch Chief, DRP/TSS **(LAY)**
RITS Coordinator **(NBH)**

Only inspection reports to the following:
D. Lange **(DJL)**
NRR Event Tracking System **(IPAS)**
GG Site Secretary **(MJS)**
Dale Thatcher **(DFT)**

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RIV:SRI:DRP/A	RI:DRP/A	RI:DRP/C - SO	C:DRP/A	
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8/23/00	8/23/00	8/23/00	8/23/00	

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-416
License No.:	NPF-29
Report No.:	50-416/00-08
Licensee:	Entergy Operations, Inc.
Facility:	Grand Gulf Nuclear Station
Location:	Waterloo Road Port Gibson, Mississippi 39150
Dates:	July 2 through August 12, 2000
Inspectors:	Jennifer Dixon-Herrity, Senior Resident Inspector Peter Alter, Resident Inspector John Russell, Resident Inspector
Approved By:	Joseph I. Tapia, Chief, Project Branch A

ATTACHMENTS:

Attachment 1: Supplemental Information

Attachment 2: NRC's Revised Reactor Oversight Process

SUMMARY OF FINDINGS

Grand Gulf Nuclear Station
NRC Inspection Report No. 50-416/00-08

IR 05000416-00-08; 7/2 - 8/12/00; Entergy Operations, Inc; Grand Gulf Nuclear Station; routine resident inspector report.

No findings were identified.

Report Details

Summary of Plant Status: During this inspection period, the plant operated at 100 percent power, with the exception of minor power reductions for main turbine control valve testing and control rod pattern adjustments.

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

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial walkdown of Division I 4160/480 V ac engineered safety features (ESF) buses, load centers, and motor control centers while the Division III emergency diesel generator was out of service for corrective maintenance. The inspectors reviewed Drawings E-1008, "4.16 KV ESF System Buses 15AA & 16AB," Revision 20; E-1017, "480 V Bus 15BA1, 15BA2, 15BA3, 15BA4," Revision 11; E-1019, "480 V Bus 15BA5 & 16BB5," Revision 9; and E-1020, "480 V Buses 15BA6 & 16BB6," Revision 7, and open maintenance action items in the work management system.

b. Findings

No findings were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors reviewed safety-related systems with performance problems to assess the effectiveness of the implementation of the maintenance rule. Specifically, the inspectors evaluated the licensee's review of the failure of fuel pool cooling containment check Valve 1G41F040 during Procedure 06-OP-1G41-Q-0001, “Fuel Pool Cooling and Cleanup Pump and Valve Operability Test,” Revision 107.

The inspectors also evaluated the licensee's review of the liquification of various 4160 volt safety-related electrical distribution system current transformers that occurred in January 1999.

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessment and Emergent Work Control (71111.13)

a. Inspection Scope

The inspectors reviewed the risk evaluations and overall plant configuration controls for work scheduled to troubleshoot and repair failed control room annunciators. In addition,

the inspectors reviewed the scheduling of monthly Technical Specification surveillances for standby liquid control pump runs and system storage tank samples.

b. Findings

No findings were identified.

1R14 Nonroutine Plant Evolutions (71111.14)

a. Inspection Scope

The inspectors reviewed the operator response to the failure of inboard main steam line drain isolation Valve 1B21F016 to close while attempting to isolate a steam leak in the drywell.

b. Findings

No findings were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following operability evaluations for technical adequacy, applicable compensatory measures, and impact on continued plant operation:

- Condition Report CR-GGN-2000-0968, failure of Division III diesel generator to remotely shutdown at the end of the monthly surveillance test
- Condition Report CR-GGN-2000-1046, overranged low pressure permissive switch for Train A feedwater leakage control system
- Condition Report CR-GGN-2000-1123, leakage from reactor water cleanup system Valve 1G33F039

b. Findings

No findings were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed or evaluated the following postmaintenance tests to determine whether the tests confirmed equipment operability:

- Procedure 06-OP-1T41-M-0002, “Standby Gas Treatment System B Operability,” Revision 103, following preventive and corrective maintenance
- Procedure 06-ME-1M61-V-0001, “Low Flow Air Test, Local Leak Rate Test,” Revision 106, for fuel pool cooling to spent fuel pool check Valve 1G41F040 following corrective maintenance

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed or reviewed the following surveillance tests:

- Procedure 06-OP-1P71-Q-0001, “Plant Chilled Water Quarterly Valve Test,” Revision 102, for plant chill water return from diesel generator room coolers Valve 1P71F301
- Procedure 06-IC-1C71-R2001-03, “Drywell High Pressure (RPS/PCIS) Calibration Channel C,” Revision 100

b. Findings

No findings were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed temporary alteration Number 00-005, which removed loss of power annunciation for inboard main steam line drains outboard isolation Valve 1B21F019 from the “Reactor Division I Isolation System Out of Service” alarm. The inspectors reviewed the safety evaluation, 10 CFR 50.59 screening, postinstallation testing, and configuration control documentation for the temporary plant modification.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors verified the accuracy and completeness of the data used to calculate and report the following performance indicators for the first two quarters of 2000:

- Safety system unavailability, high pressure injection system
- Safety system unavailability, heat removal system

The inspectors reviewed corrective action program records, operations department logs, performance indicator technique sheets, and NRC inspection reports to complete the verification of the performance indicators.

b. Findings

No findings were identified.

4OA5 Performance Indicator Data Collecting and Reporting Process Review (TI 2515/144)

a. Inspection Scope

The inspectors reviewed the licensee's process for the collection and reporting of performance indicator data. The following performance indicators were reviewed to determine if the licensee was appropriately implementing NRC and industry guidance for collecting and reporting data:

- Initiating Events - Unplanned Power Changes per 7000 Critical Hours
- Mitigation Systems - High Pressure Injection System Unavailability
- Occupational Radiation Safety - Occupational Exposure Control Effectiveness
- Physical Protection - Protected Area Security Equipment Performance

The inspectors reviewed Procedure LI-107, "NRC Performance Indicator Process," Revision 0, with respect to the indicator definitions, data reporting elements, and calculation methods for consistency with Nuclear Energy Institute Guidance Document NEI-99-02, “Regulatory Assessment Performance Indicator Guideline,” dated March 28, 2000.

b. Findings

No findings were identified.

4OA6 Meetings

.1 Exit Meeting Summary

On August 17, 2000, the inspectors conducted an exit meeting with Mr. Joseph Venable, General Manager, and other members of plant management and presented the inspection results. Plant management acknowledged the findings presented and informed the inspectors that no proprietary material was examined during the inspection.

ATTACHMENT 1

PARTIAL LIST OF PERSONS CONTACTED

C. Bottemiller, Manager, Plant Licensing
W. Eaton, Vice President, Operations
B. Edwards, Manager, Maintenance
C. Ellsaesser, Manager, Corrective Action and Assessment
E. Harris, Manager, Systems Engineer
C. Lambert, Director, Engineering
W. Shelly, Manager, Training
G. Sparks, Manager, Operations
J. Venable, General Manager, Plant Operations
R. Wilson, Superintendent, Radiation Protection
M. Wright, Manager, Planning and Scheduling

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Closed

None.

Discussed

None.

LIST OF DOCUMENTS REVIEWED

Maintenance Action Items (MAI #):

267254
267652
277156
280325
281873
281919
281920
282007
282010

Condition Reports:

CR-GGN-1988-0619
CR-GGN-1999-0311
CR-GGN-2000-0448
CR-GGN-2000-0568
CR-GGN-2000-0711
CR-GGN-2000-0793
CR-GGN-2000-0934
CR-GGN-2000-0948
CR-GGN-2000-0967
CR-GGN-2000-0972
CR-GGN-2000-1015
CR-GGN-2000-1029

ATTACHMENT 2

NRC'S REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
•Initiating Events	•Occupational	•Physical Protection
•Mitigating Systems	•Public	
•Barrier Integrity		
•Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC used two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, or RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http:\\www.nrc.gov\NRR\OVERSIGHT\index.html.