



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report No.: 50-416/92-10

Licensee: Entergy Operations, Inc.
P. O. Box 756
Port Gibson, MS 39150

Docket No.: 50-416

Facility Name: Grand Gulf Nuclear Station

Inspection Conducted: April 13 - 17, 1992

Inspector: Curt Rapp for 5/4/92
L. P. King Date Signed

Accompanying Personnel: Curt Rapp

Approved by: R. V. Crienjak for 5/7/92
R. V. Crienjak, Chief Date Signed
Operational Programs Section
Operations Branch
Division of Reactor Safety

SUMMARY

Scope: This was a routine, announced Emergency Operating Procedures follow-up inspection. Its purpose was to confirm that corrective actions for previous findings were adequate. Additionally, the licensees' integrated surveillances were reviewed to confirm that the acceptance criteria satisfied plant design parameters

Results: The inspectors found the licensee had adequately addressed previous inspection findings and the integrated surveillance acceptance criteria was satisfactory. The licensee was responsive to past inspection findings and corrective action were timely. However, the quality of the closeout packages provided hindered the inspectors' review of the corrective actions. The availability of on-site engineering was judged as enhancing plant operations. No violations or deviations were identified.

REPORT DETAILS

1. Personal Contacted

Licensee Employees

- *W. T. Cottle, Vice President - Grand Gulf Nuclear Station
- *M. A. Dietrich, Director - Quality Services
- *J. P. Dimmette, Manager - Performance and System Engineering
- *C. Ellsaesser, Operations Superintendent
- *D. L. Pace, Director - Design Engineering
- *R. Pattersen, Assistant to General Manager
- *M. J. Meisner, Director - NS&RA
- *J. E. Reaves, Manager - Quality Services
- *R. Ruffin, Licensing Specialist
- *R. G. West, Assistant Manager - Performance and System Engineering

Other licensee employee contacted include engineers, operators, and office personnel.

NRC Resident Inspectors

- J. Mathis, Senior Resident Inspector
- *C. A. Hughey, Resident Inspector
- *F. X. Talbot, Resident Inspector (Intern)

*Attended Exit Interview on April 16, 1992

2. Action on Previously Identified Inspection Findings (92701, 92702)

- a. (Closed) IFI 91-02-01: Procedural step in Attachment 28 to Alternate SLC Injection were incomplete concerning obtaining Boro from the warehouse.

The licensee included procedural guidance in Attachment 28 to obtain necessary equipment to transport and add boron to the CST. This item is closed.

- b. (Closed) IFI 91-02-02: Plant labeling/procedure discrepancies continue to exist.

The inspectors reviewed the identified labeling discrepancies and found they were corrected. The licensee had changed the procedure to match plant tagging. The procedure discrepancies were also reviewed and found adequately corrected. This item is closed.

- c. (Closed) VIO 92-04-01: Failure to complete the rod withdrawal block surveillance for the SRMs before the flux dropped below IRM range 3 as required by procedure.

The licensee had added procedural guidance to limit the cooldown by closing main steam line drain valves. The testing band was changed to require the surveillance to be completed before any SRM indicates less than 100 cps. This change did not affect the surveillance because the SRM rod withdrawal block is bypassed when the SRMs indicate above 100 cps. A caution was added that directed the operators to follow any power increase by ranging the IRMs if a recriticality occurs. The inspectors reviewed these changes and found they were adequate. This item is closed.

The inspectors found the licensee had been responsive to valid technical findings. Necessary procedural and programmatic changes were well developed and timely. This was judged by the inspectors as a positive improvement to plant operations. However, the information supplied by the licensee for inspector review was not well prepared. Irrelevant material was included making it difficult for the inspectors to understand what changes were made and where. This negatively affected the inspectors' review of the licensee's corrective actions.

3. Review of Integrated Surveillance (61701)

The inspectors reviewed the licensee's quarterly and 18 month surveillance procedures for the HPCS, LPCS, and LPCI systems. This was to confirm compliance with ECCS response time TS requirements. The ECCS response time TS did not require flow into the vessel or pump start but did require the valves to stroke open on a simulated actuation signal. Pump testing was done by the quarterly surveillance and can be full flow tested with recirculation to the suppression pool. The acceptance criterion for flow includes instrument error.

Licensee engineering has completed system design criteria manuals for these systems and they were reviewed. All plant documentation was available on the microfilm system and easily retrievable. This allowed the inspectors to review the initial documentation between the licensee and GE that established the basis for system flows and response times.

The last 18 month ECCS channel surveillances were reviewed. Overall response time was determined by testing a different channel every 18 months. The inspectors noted the system response time for the LPCS and LPCI systems indicated in the system design criteria manuals no longer applied. TS table 3.3.3-3 listed a 27 second ECCS response time for the HPCS system. The LPCS and LPCI systems response times were listed as not applicable. The inspectors reviewed plant documentation and found the LPCS and LPCI response times were adequately measured in other surveillances. The last completed HPCS surveillance, dated October 1990, was reviewed to determine if the HPCS system could meet the 27 second response time. No problems were found in the review of the HPCS surveillance.

The inspectors walked down the HPCS system to determine where data was taken and the instrumentation used. All instrumentation was readily accessible and clearly labeled.

The availability of plant documentation, the presence of design engineers on-site, and the development of system design criteria manuals made access to system design information readily available. These were judged by the inspectors as a positive enhancement to plant engineering support.

4. Exit Interview

The inspection scope and findings were summarized on April 16, 1992, with those persons identified in paragraph 1. The inspectors discussed in detail the areas inspected and inspection findings. No dissenting comments were received from the licensee. No proprietary material was reviewed by the inspectors.

<u>Item</u>	<u>Status</u>	<u>Description/Paragraph</u>
50-416/90-02-01	CLOSED	IFI - Procedural steps in Attachment 28 to Alternate SLC Injection were incomplete concerning obtaining Boron from the warehouse.
50-416/90-01-02	CLOSED	IFI - Plant labeling/procedure discrepancies continue to exist.
50-416/92-04-01	CLOSED	VIO - Failure to complete the rod withdrawal block surveillance for the SRMs before the flux dropped below IRM range 3 as required by procedure.

5. Acronyms and Initialisms

CST	Condensate Storage Tank
GE	General Electric
ECCS	Emergency Core Cooling System
cps	counts per second
LPCI	Low Pressure Core Injection
LPCS	Low Pressure Core Spray
IRM	Intermediate Range Monitor
HPCS	High Pressure Core Spray
TS	Technical Specifications
SRM	Source Range Monitor