



Entergy Operations, Inc.
1340 Echelon Parkway
Jackson, Mississippi 39213-8298
Tel 601-368-5758

F. G. Burford
Acting Director
Nuclear Safety & Licensing

CNRO-2004-00035

May 27, 2004

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29
Request for Relief GGNS-PRR-E21-02 for the Low Pressure Core Spray Pump
2nd IST Ten-Year Interval

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(a)(3)(ii), Entergy Operations, Inc. (Entergy) hereby requests NRC approval of the following request for the 2nd ten-year interval of the Inservice Testing Program:

On a one time basis the testing frequency of the Low Pressure Core Spray Pump will be extended until Refueling Outage 14, scheduled for Fall 2005. After the outage the testing frequency will be returned to the original testing frequency.

The details of the 10 CFR 50.55a request are enclosed.

Should you have any questions regarding this request, please contact Bill Brice at (601) 368-5076.

This letter contains new commitments as identified in Attachment 2.

Very truly yours,

A handwritten signature in black ink, appearing to read "F. G. Burford".

FGB/WBB/bal

Attachments: 1. Request for Alternative No. GGNS- PRR-E21-02
2. Licensee-Identified Commitments

cc: (See Next Page)

A047

cc: Mr. W. A. Eaton (ECH)
Mr. G. A. Williams (GGNS)

Dr. Bruce S. Mallett
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

U. S. Nuclear Regulatory Commission
Attn: Mr. Bhalchandra Vaidya MS O-7D1
Washington, DC 20555-0001

Mr. T. L. Hoeg, GGNS Senior Resident
Mr. D. E. Levanway (Wise Carter)
Mr. L. J. Smith (Wise Carter)
Mr. N. S. Reynolds
Mr. H. L. Thomas

ATTACHMENT 1

CNRO-2004-00035

REQUEST FOR ALTERNATIVE

GGNS-PRR-E21-02

REQUEST FOR RELIEF

GGNS PRR-E21-02

DATE: 5-27-2004

PAGE 1 OF 3

SYSTEM **Low Pressure Core Spray / E21**

Component Identification	BPV Code Class	Type	Component Function
E21C001	2	Motor Driven Vertical Line Shaft	Low Pressure Core Spray (LPCS)

COMPONENT FUNCTION

The LPCS pump automatically starts to provide flow to the reactor greater than or equal to 7115 gpm with 128 psid (differential) between reactor vessel and suppression pool air volume outside the Drywell. The LPCS pump automatically starts to deliver flow to the reactor when vessel pressure is below 295 psid (differential) between reactor vessel and suppression pool air volume outside the Drywell.

ASME CODE TEST REQUIREMENTS

ASME/ANSI Standard OMa-1988, Part 6, "Inservice Testing of Pumps in Light-Water Reactor Power Plants"(OM-6), paragraph 5.1, requires an inservice test for each pump, nominally every 3 months except as provided for pumps in regular use, pumps in systems out of service, and pumps lacking required fluid inventory (OM-6, paragraphs 5.3, 5.4, and 5.5).

BASIS FOR RELIEF

Background

LPCS pump testing normally involves opening valve E21F012, which is a single containment isolation valve located on a 14 inch return line to the suppression pool. This return line is designed to allow full flow testing of the LPCS pump without injecting water into the reactor pressure vessel by taking water from, and returning it to, the suppression pool. Valve E21F012 isolates this return path to the suppression pool to ensure that the pump discharge would be directed to the vessel if needed. In addition, the valve must also be closed to allow the jockey pump to keep the system filled when the LPCS pump is in standby.

GGNS Technical Specifications, Surveillance Requirement 3.5.1.4 requires that the LPCS pump develop a flow rate of ≥ 7115 gpm at a total developed head ≥ 290 psid (this differential is more conservative than the design value of 128 psid as provided in the Component Function statement above). The Frequency for performance of the surveillance is "In accordance with the Inservice Testing Program". The GGNS Inservice Testing Program includes a quarterly flow test for the LPCS pump and is used to implement the Technical Specification requirement.

REQUEST FOR RELIEF

GGNS PRR-E21-02

DATE: 5-27-2004

PAGE 2 OF 3

During the last full flow test of the LPCS pump, problems were encountered when closing valve E21F012. Analyses have been done to determine the condition of the valve. Currently the valve is secured in the closed position and is considered to be performing its safety functions.

Valve E21F012 information is as follows.

Component Identification	BPV Code Class	Size (Inches)	OM Code Category
E21F012	2	14	A

Basis

The following provide reasonable assurance that the pump is operationally ready:

- A thorough review of the LPCS pump flow test results that includes all tests from 1991 to present was conducted. All the test results indicate good pump performance. The data is consistent and results are well below the "alert" level. The last test (April 28, 2004) also indicated acceptable results.
- The LPCS pump is normally in the standby mode and is not operated routinely except for testing. The LPCS pump is not subject to the wear and the consequential degradation of a pump that is in continuous service.
- The LPCS pump is operable and capable of performing its safety function. Valve E21F012 is not required to open in order for the system or the pump to perform its safety function. It is only required to be closed.

Compliance with the specified requirements of OM-6, paragraph 5.1 to perform the pump quarterly test would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. This is demonstrated by the following:

- The required flow test of the LPCS pump cannot be performed without the E21F012 being open. The valve is currently closed and deactivated with the associated breaker open.
- Because the valve is a single containment isolation valve and there is no isolation capability between it and the containment, the containment would have to be breached and Technical Specification 3.6.1.1 Limiting Condition for Operation (LCO) would have to be entered in order to repair or replace the valve. This LCO only allows 1 hour to restore the breach. Otherwise, a plant shutdown must be completed within 12 hours.
- Certain parts required to repair the valve (i.e., valve body and stem plug assembly) are not currently available. Some of these parts have long lead times because they are custom built and forged.

PROPOSED ALTERNATIVE TESTING

Pursuant to 10 CFR 50.55a(a)(3)(ii), Entergy proposes the following alternative to the testing frequency specified above. On a one time basis the testing frequency will be extended until Refueling Outage 14, scheduled for Fall 2005. After the outage, the testing frequency will be returned to the original testing frequency.

REQUEST FOR RELIEF

GGNS PRR-E21-02

DATE: 5-27-2004

PAGE 3 OF 3

CONCLUSIONS

10 CFR 50.55a(a)(3) states:

Proposed alternatives to the requirements of (c), (d), (e), (f), (g), and (h) of this section or portions thereof may be used when authorized by the Director of the Office of Nuclear Reactor Regulation. The applicant shall demonstrate that:

- (i) The proposed alternatives would provide an acceptable level of quality and safety, or
- (ii) Compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Entergy believes that there is reasonable assurance that the pump is operationally ready and that compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Entergy requests that the NRC staff authorize the proposed alternative frequency of testing as described above pursuant to 10 CFR 50.55a(a)(3)(ii).

ATTACHMENT 2

CNRO-2004-00035

LICENSEE-IDENTIFIED COMMITMENTS

GGNS-PRR-E21-02

LICENSEE-IDENTIFIED COMMITMENT

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
After Refueling Outage 14, scheduled for Fall 2005, the testing frequency for the LPCS pump will be returned to the original testing frequency specified in the IST Plan, Program Section No. CEP-IST-2. Reference Relief Request No. GGNS-PRR-E21-02.	✓	Per IST Program	After RF 14