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Michael A. Krupa Director Nuclear Safety Assurance

GNRO-2004-00044

July 20, 2004

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

- SUBJECT: Supplement to Relief Request "Request for Relief GGNS-PRR-E21-02 for the Low Pressure Core Spray Pump, 2nd IST Ten-Year Interval" Grand Gulf Nuclear Station, Unit 1 Docket No. 50-416 License No. NPF-29
- REFERENCE: Letter CNRO-2004/00035 from F.G. Burford to USNRC, "Request for Relief GGNS-PRR-E21-02 for the Low Pressure Core Spray Pump 2nd IST Ten-Year Interval," dated May 27, 2004

Dear Sir or Madam:

By letter dated May 27, 2004, Entergy Operations, Inc. (Entergy) submitted ASME Request for Relief GGNS-PRR-E212-02, Revision 0 for Grand Gulf Nuclear Station, Unit 1 (GGNS). In that submittal Entergy requested NRC staff approval to extend the testing frequency of the Low Pressure Core Spray Pump on a one time basis until Refueling Outage 14, scheduled for September 2005. The request applied to the 2nd ten-year interval of the Inservice Testing Program pursuant to 10 CFR 50.55a(a)(3)(ii).

During the course of review, Entergy and members of your staff held calls to discuss the proposed request. As a result, the NRC staff determined that additional information was necessary to complete their review. The additional information describing Entergy's intent is enclosed.

Should you have any questions regarding this request, please contact Matt Crawford at (601) 437-2334.

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This letter contains no new commitments.

Sincerely,

M. A Kenpa

MAK/MLC/amt

CC:

Attachment: Response to Request for Additional Information Pertaining to Relief No. GGNS- PRR-E21-02,

NRC Senior Resident Inspector Grand Gulf Nuclear Station Port Gibson, MS 39150

> U. S. Nuclear Regulatory Commission, Region IV ATTN: Dr. Bruce S. Mallett 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011-4005

U. S. Nuclear Regulatory Commission ATTN: Mr. Nageswaran Kalyanam, NRR/DLPM **ATTN: FOR ADDRESSEE ONLY** Mail Stop OWFN/7D-1 Washington, DC 20555-0001

Mr. Brian W. Amy, MD, MHA, MPH Mississippi Department of Health P. O. Box 1700 Jackson, MS 39215-1700

Mr. D. E. Levanway (Wise Carter) Mr. L. J. Smith (Wise Carter) Mr. N. S. Reynolds Mr. H. L. Thomas Attachment 1

GNRO-2004-00044

GGNS-PRR-E21-02

Response to Request for Additional Information Pertaining to Relief No. GGNS-PPR-E21-02

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION PERTAINING TO REQUEST NO. GGNS-PRR-E21-02

NRC Question

During a recent call to discuss the subject relief request, Entergy expressed their intent to install a mechanical restraint device for the duration of the proposed relief interval. Briefly describe the mechanical restraint device that GGNS intends to install on the LPCS valve during this period.

Entergy Response

The Low Pressure Core Spray (LPCS) System is currently operable and the LPCS full flow test valve (1E21F012) is currently in a deactivated and closed position. In this configuration the valve fulfills its containment isolation safety function.

Entergy has performed detailed analysis to confirm that even in its current overthrust position the valve is considered structurally sound. However, in order to better assure industrial safety during this condition, Entergy intends a mechanical restraint device (i.e., locking stem nut) on the valve stem. This device will ensure that there is no inadvertent release of energy via the overthrust on the valve seat. The restraint will be designed and installed to add no additional stored energy to the valve actuator.

The locking stem nut will be comprised of two halves with each fitted to the exposed stem threads to ensure maximum engagement. Securing hardware used to join the two halves initially will be finger tight to allow the nut to be spun up hand tight against the underside of the yoke. Once the nut is in contact and snug with the underside of the yoke, the stem nut clamping fasteners will be tightened wrench tight.

This stem nut arrangement will maintain stem position without imparting any additional loads into the actuator assembly. The stem nut is designed and positioned to transfer the entire stem load to the underside of the valve yoke plate. Two simplified sketches of the restraint device are provided below.

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LOCKING STEM NUT DEVICE (CONCEPTUAL DESIGN) Attachment 1 to GNRO-2004-00044 Page 3 of 3



SECTION A-A