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F. G. Burford  
Acting Director  
Nuclear Safety & Licensing

CNRO-2006-00044

October 4, 2006

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

**SUBJECT:** Request for Alternative GG-ISI-003  
Request to Extend the Current Inservice Inspection Interval in  
accordance with NRC Information Notice 98-44

Grand Gulf Nuclear Station  
Docket No. 50-416  
License No. NPF-29

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy Operations, Inc. (Entergy) requests approval to extend the second Inservice Inspection (ISI) interval for piping at Grand Gulf Nuclear Station (GGNS) to the end of its sixteenth refueling outage, currently scheduled for fall 2008. This request is enclosed as Request for Alternative GG-ISI-003. This request does not involve Examination Category B-F piping welds, which are inspected in accordance with Generic Letter 88-01, *NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping*. The requested extension is approximately four months beyond the one-year extension allowed by ASME Section XI IWB-2412(b).

Entergy requests that the NRC staff approve GG-ISI-003 by March 1, 2007 in order to support planning efforts for the upcoming spring 2007 refueling outage at GGNS. Should you have any questions regarding this submittal, please contact Guy Davant at (601) 368-5756.

This letter contains no commitments.

Very truly yours,

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

FGB/GHD/ghd

Enclosure: Request for Alternative GG-ISI-003

A047

cc: Mr. W. R. Brian (G-ADM-1)  
Mr. W. A. Eaton (E-MCH-38)

Dr. Bruce S. Mallett  
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U. S. Nuclear Regulatory Commission  
Attn: Mr. B. K. Vaidya  
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NRC Senior Resident Inspector  
Grand Gulf Nuclear Station  
Route 2, Box 399  
Port Gibson, MS 39150

**ENCLOSURE**

**CNRO-2006-00044**

**REQUEST FOR ALTERNATIVE  
GG-ISI-003**

**ENTERGY OPERATIONS, INC.  
GRAND GULF NUCLEAR STATION**

**REQUEST FOR ALTERNATIVE  
GG-ISI-003**

Components/Numbers: Piping Welds

Code Class: 1 and 2

References:

1. ASME Section XI, 1992 Edition
2. NRC Information Notice 98-44, *Ten-Year Inservice Inspection Program Update for Licensees that Intend to Implement RI-ISI of Piping*
3. Entergy letter CNRO-2006-00043 to the NRC, *Request for Alternative GG-ISI-002 – Request to use ASME Code Case N-716*, dated September 11, 2006

Examination Category: B-J, C-F-1, and C-F-2

Item Numbers: All

Description: Piping Welds

Unit / Inspection Interval Applicability: Grand Gulf Nuclear Station (GGNS) second (2<sup>nd</sup>) 10-year interval

**I. CODE REQUIREMENT(S)**

ASME Section XI Table IWB-2412-1 defines an inservice inspection (ISI) interval to be 10 years in duration. IWB-2412(b) allows extending the interval for one year to coincide with a plant outage.

**II. REQUESTED ALTERNATIVE**

Pursuant to 10 CFR 50.55a(a)(3)(i), Entergy requests authorization to extend the second interval to include an additional refueling outage (approximately 4 months beyond the Code-allowed one-year extension) for items in Examination Categories B-J, C-F-1, and C-F-2. This alternative will not affect the third interval start date of June 2007.

**III. BASIS FOR RELIEF**

NRC Information Notice (IN) 98-44, *Ten-Year Inservice Inspection Program Update for Licensees that Intend to Implement RI-ISI of Piping* (Reference 2), states that the probabilistic risk assessment technology in NRC regulatory activities should be increased to the extent supported by state-of-the-art methods and data and in a manner that complements the NRC's deterministic approach. Basically, this information combined with risk assessment techniques and associated data provides for developing an effective approach to the ISI program. This approach provides an acceptable level of quality and safety, as required by 10 CFR 50.55a(a)(3)(i). IN 98-44 also states that the

NRC staff will consider authorizing a delay of up to 2 years in implementing the next 10-year ISI program for piping only in order for the licensee to develop and obtain approval for the risk-informed ISI program for piping.

GGNS is currently in the second ISI interval as defined by ASME Section XI Code for Inspection Program B. GGNS has submitted to the NRC staff Request for Alternative GG-ISI-002 (Reference 3) to implement a risk-informed / safety-based inservice inspection (RIS\_B) program. Entergy plans to implement the RIS\_B ISI program during the fifteenth refueling outage (RF-15), currently scheduled for spring 2007. If approval of the RIS\_B ISI program cannot be accomplished prior to RF-15, Entergy plans to implement it during the sixteenth refueling outage (RF-16), currently scheduled for fall of 2008. To accomplish this, Entergy requires approval of this request, GG-ISI-003, to extend the second ISI interval to the end of RF-16 (approximately 4 months beyond the Code-allowed one-year extension).

The RIS\_B process requested in Request for Alternative GG-ISI-002 (Reference 3) is based upon ASME Code Case N-716, *Alternative Piping Classification and Examination Requirements, Section XI Division 1*, which is founded in large part on the RI-ISI process as described in Electric Power Research Institute (EPRI) Topical Report (TR) 112657 Rev. B-A, *Revised Risk-Informed Inservice Inspection Evaluation Procedure*. Request for Alternative GG-ISI-002 demonstrates a reduction in risk (or maintains risk neutrality) while substantially reducing worker exposure and undue burden. Because risk-informed ISI programs focus inspections (and inspection methods) on locations potentially susceptible to degradation while considering the consequence of piping failure, a more robust targeted inspection program can be defined.

#### IV. CONCLUSION

10CFR50.55a(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."

As discussed in Section III above, the extension to the end of RF-16 would allow time for the NRC to review GGNS' risk-informed ISI submittal (Reference 3) while not affecting future ISI intervals. Therefore, Entergy requests authorization to perform the requested alternative to the Code requirement pursuant to 10 CFR 50.55a(a)(3)(i).