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GNRO-2010/00030

April 29, 2010

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

SUBJECT: Response to NRC Request for Additional Information for ISI Relief Requests GG-ISI-005 through GG-ISI-012 for NRC Email Dated March 30, 2010 (TAC NOS ME1376-ME1383)

> Grand Gulf Nuclear Station, Unit 1 Docket No. 50-416 License No. NPF-29

#### REFERENCES: 1. NRC Email dated March 30, 2010 Request for Additional Information RE: Reliefs Requests GG-ISI-005 through GG-ISI-012 (TAC NOS ME1376-ME1383) (MIL100890602 and MIL100890606)

- Letter GNRO-2010/00015, Response to NRC Request for Additional Information for ISI Relief Requests GG-ISI-005 through GG-ISI-012 for NRC Letter Dated January 4, 2010 (TAC NOS ME1376-ME1383), letter to NRC dated February 11, 2010
- NRC Letter GNRI-2010/00007, Request for Additional Information RE: Reliefs Requests GG-ISI-005 through GG-ISI-012 (TAC NOS ME1376-ME1383), dated January 4, 2010
- 4. Letter GNRO-2009/00051, Response to NRC Request for Additional Information for ISI Relief Requests GG-ISI-005 through GG-ISI-012, dated October 1, 2009
- NRC Letter GNRI-2009/00063, Request for Additional Information RE: Reliefs Requests GG-ISI-005 through GG-ISI-012 (TAC NOS ME1376-ME1383), dated July 1, 2009
- Letter GNRO-2009/00018, Inservice Inspection (ISI) Relief Requests GG-ISI-005 through 012 American Society of Mechanical Engineers Section XI Second 10-Year Inspection Interval Closeout, dated May 29, 2009

Dear Sir or Madam:

In the letter dated May 29, 2009 (GNRO-2009/00018), Grand Gulf Nuclear Station (GGNS) requested relief pursuant to 10CFR50.55a(g)(5)(iii). Based on its review of the application, the NRC requested via email dated March 30, 2010 (MILs100890602, 100890606) additional

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information to complete the required reviews. The responses to the request for additional information are attached to this letter.

This letter contains no commitments.

Should you have any questions regarding this submittal, please contact Ernest Rufus, Supervisor Engineering Programs at 601-437-6582.

Sincerely,

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## CLP/MJL

Attachment: Responses to Request for Additional Information: Relief Requests GG-ISI-005 through GG-ISI-012

CC:

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

U. S. Nuclear Regulatory Commission ATTN: Mr. Elmo E. Collins (w/2) Regional Administrator, Region IV 612 East Lamar Drive, Suite 400 Arlington, TX 76011-4125

U.S. Nuclear Regulatory Commission ATTN: Mr. Carl F. Lyon, NRR/ADRO/DORL (w/2) Mail Stop OWFN/8 B1 11555 Rockville Pike Rockville, MD 20852-2378

# RESPONSES TO REQUEST FOR ADDITIONAL INFORMATION: RELIEF REQUESTS GG-ISI-005 THROUGH GG-ISI-012

The NRC requested GGNS to provide detailed and specific information in order to complete the review of Relief Requests GG-ISI-005 through GG-ISI-012. The responses to this request are provided below.

# SURFACE EXAMINATIONS

#### NRC Request #1

The licensee received approval to use American Society of Mechanical Engineers, Boiler and Pressure Vessel Code (ASME Code), Code Case N-663 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML032390190, August 26, 2003), which allows foregoing of required surface examinations after an evaluation for OD surface degradation is completed. For examination category B-J, the licensee may have performed some of the ISI examinations prior to this approval, and appears that the licensee did not perform the Code-required surface examinations at that time. The licensee needs to discuss this issue and confirm whether the required surface examinations were performed. The licensee should also confirm whether the examination dates provided in the specific Request for Additional Information (RAI) response (February 11, 2010), are correct and apply only to the volumetric examinations.

#### Response

The category B-J welds in question were required to be performed during the second period of the second ten year interval. It is true that the surface examinations were not performed in conjunction with the required ultrasonic examinations. The request for alternative to utilize Code Case N663 was submitted to the staff on December 6, 2002 and was approved for use on August 26, 2003. The second period of the second interval started June of 2000 and ended June of 2004 and included two refueling outages in order to complete all required examinations. Therefore, delaying the surface examinations on the Category B-J welds during RF12 (Fall 2002) was performed at risk realizing that if approval of the alternative was not granted prior to RF13 (spring 2004) the licensee would be required to perform the examinations during RF13 or prior to the end of the second period of the second interval. The subject welds are identified as follows:

B9.11	1B33G10-A1-B 24" Pipe to Cross, SS	
B9.11	1B33G001W11	24" Pipe to Tee, SS
B9.11	1B33G10-A1-A	24" Pipe to Cross, SS
B9.31	1B33G10-A1-F	12" RCS Branch, SS
B9.31	1B33G10-A1-G	12" RCS Branch, SS
B9.31	1B33G10-A1-H	12" RCS Branch, SS

# APPLICATION OF ASME CODE APPENDIX VIII

### NRC Request #2

For Examination Category B-F welds included in RR GG-ISI-007, the licensee's submittal dated May 29, 2009, states that Appendix VIII procedures, personnel and equipment were used. However, in the specific RAI response dated February 11, 2010, the subject welds examinations show using ASME requirements at the time of the examination (March 30, and April 1, 2007), which were not Appendix VIII-based, and further states that the subject weld is not covered by Appendix VIII. It is noted that Appendix VIII requirements do apply for the subject welds. Please confirm the examination dates and the ASME Code requirements used to perform the volumetric examinations on the subject Class 1 dissimilar metal welds.

# Response

These exams are covered by ASME Section XI Appendix VIII. Examination dates for the subject welds are identified as follows:

B5.10 EXAM DATE 4-01-07	N01A-KB	24" Recirculation Nozzle-to-Safe End, SS
B5.10 EXAM DATE 4-01-07	N02K-KB	14" Recirc Nozzle-to-Safe End, SS

## NRC Request #3

For Examination Category B-G-1 items included in RR GG-ISI-008, the licensee's submittal and specific RAI response dated May 29, 2009 and February 11, 2010, respectively, state that Appendix VIII does not apply for the subject welds. In addition, at least one of the examination dates provided in the licensee specific RAI response is after the mandatory Appendix VIII to Section XI implementation date (November 22, 2002). It is noted that Appendix VIII requirements do apply for the subject welds. Please confirm the examination dates and the ASME Code requirements used to perform the volumetric examinations on the subject Class 1 welds. If applicable, please explain why the volumetric examinations were not done in accordance with Appendix VIII.

## Response

The only part of Category B-G-1 that is covered under ASME Section XI, Appendix VIII, Supplement 5 is bolting greater than 2 inches in diameter. The examinations in question were performed on the Reactor Flange Ligaments. These are not subject the ASME Section XI, Appendix VIII requirements. Examination dates are correct as stated in the specific RAI response dated February 11, 2010.

## NRC Request #4

For Examination Category B-J welds included in RR GG-ISI-009, the licensee's submittal dated May 29, 2009, states that Appendix VIII procedures, personnel and equipment were used. However, in the specific RAI response dated February 11, 2010, three of the subject welds examinations show using ASME requirements at the time of the examination (November 4 and 5, 1999), which were not Appendix VIII-based. Please confirm the examination dates and the ASME Code requirements used to perform the volumetric examinations on the subject Class 1 piping welds.

# Response

Appendix VIII Supplement 3 was not approved until May 22, 2000. The subject welds are covered under ASME Section XI. Examination dates for the three welds are identified as follows:

B9.11 Exam performed 11-5-99	B33G001-W34	24" RCS Pipe to Cross, SS	
B9.11 Exam performed 11-5-99	B33G10-B1-A	16" RCS Pipe to Cross, SS	
B9.11 Exam performed 11-5-99	B33G10-B1-B	16" RCS Pipe to Cross, SS	

# NRC Request #5

For Examination Category C-F-2 weld included in RR GG-ISI-011, the licensee's submittal dated May 29, 2009, states that Appendix VIII procedures, personnel and equipment were used. However, in the specific RAI response dated February 11, 2010, the subject Weld 1E51G004-16-8-3 examinations show using ASME requirements at the time of the examination (February 23, 2004), which were not Appendix VIII-based, and further states that the subject weld is not covered by Appendix VIII. It is noted that Appendix VIII requirements

do apply for the subject weld. Please confirm the examination date and the ASME Code requirements used to perform the volumetric examinations on the subject Class 2 piping weld.

## Response

This exam was performed in accordance with Appendix VIII, Section XI, Supplement 2. Examination date for the subject weld is identified as follows:

C5.51 Exam performed 2-23-04	1E51G004-16-8-3	8.0" RCIC, Pipe – Elbow, CS	

# **MISCELLANEOUS ITEMS**

## NRC Request #6

In RR GG-ISI-009, for Examination Category B-J piping welds, the scan angles used to perform the ultrasonic examinations for Weld 1B33G10-A1-B vary between values listed in the licensee submittal and RAI response tables and sketch, dated May 29, 2009, and February 11, 2010, respectively. Please confirm the ultrasonic scan angles used to perform the volumetric examinations on Weld 1B33G10-A1-B.

### **Response**

According to the NDE Report for Component Weld ID 1B33G10-A1-B, the angles utilized during were 45°shear wave and 45°Refracted Longitudinal Search Units to achieve maximum coverage.

### NRC Request #7

In RR GG-ISI-009, for Examination Category B-J piping welds, the licensee submittal, dated May 29, 2009 describes piping Weld 1B33G10-A1-A as a 24" Pipe to Cross. However, the licensee RAI response, dated October 1, 2009, describes the same weld as a 24" Pipe to Tee. Please confirm the correct description for piping Weld 1B33G10-A1-A.

### Response

The component configuration for Weld 1B33G10-A-A1-A is "Pipe to Cross".

### NRC Request #8

In RR GG-ISI-009, for Examination Category B-J piping welds, the licensee RAI response, dated October 1, 2009, table shows conflicting scan limitation descriptions for piping Welds B33G10-B1-F, -G, and -H. One column states scanning was conducted from the pipe side only, and column "a" states scanning was done only from the elbow side. Although Drawing GG-ISI-011 shows scanning was only done from the pipe side, please confirm the correct scanning limitation for the subject sweep-o-let to pipe welds.

### Response

Scanning was performed from the PIPE side only.

### NRC Request #9

The following RR titles are interchangeably used in the GGNS submittal and RAI responses, GGNS-ISI-xxx and GG-ISI-xxx. Please clarify the correct RR title to use.

### <u>Response</u>

The GGNS-ISI-xxx is for wording and the GG-ISI-xxx is for drawings.