



GARY R. PETERSON
Vice President
McGuire Nuclear Station

Duke Power
MGO1VP / 12700 Hagers Ferry Rd.
Huntersville, NC 28078-9340

704 875 5333
704 875 4809 fax
grpeters@duke-energy.com

March 26, 2007

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

Subject: Duke Power Company LLC d/b/a
Duke Energy Carolinas, LLC (Duke)
McGuire Nuclear Station Unit 2
Docket No. 50-370
Relief Request (RR) 05-MN-003
Response to Request for Additional Information

This letter provides the additional information requested by the NRC staff via electronic mail from John F. Stang. The NRC staff's questions and Duke's responses are provided in Enclosure 1.

Duke requests that the proprietary drawings in Attachment 1 of Enclosure 1 be withheld from public disclosure pursuant to 10 CFR 2.390

Questions on this matter should be directed to Kenneth L. Ashe, McGuire Regulatory Compliance, at (704) 875-4535.

Sincerely,

G.R. Peterson

Enclosure

U.S. Nuclear Regulatory Commission
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cc w/Enclosure:

Mr. W.D. Travers
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303

Mr. J.F. Stang Jr., Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
One White Flint North, Mail Stop O8-H4A
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. J.B. Brady
Senior Resident Inspector
U.S. Nuclear Regulatory Commission
McGuire Nuclear Station

Enclosure

**Response to RAI for
Relief Request 05-MN-003**

1. Please provide drawings or sketches of the American Society of Mechanical Engineers (ASME) Code, Section XI, Category B-A and B-F components listed on pages 1 and 2 of RR 05-MN-003.

Response: Attachment 1 to this enclosure includes the Duke Energy drawings for the following components listed on RR 05-MN-003.

Weld: 2RPV-W03	Drawings: MCM 2201.01-0001 001 and MCM 2201.01-0019 001
Weld: 2RPV-W01	Drawings: MCM 2201.01-0001 001 and MCM 2201.01-0019 001
Weld: 2RPV-W15-SE	Drawings: MCM 2201.01-0018 001, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002
Weld: 2RPV-W17-SE	Drawings: MCM 2201.01-0018 007, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002
Weld: 2RPV-W18-SE	Drawings: MCM 2201.01-0018 010, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002
Weld: 2NC2F-1-1	Drawings: MCM 2201.01-0018 001, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002
Weld: 2NC2F-3-1	Drawings: MCM 2201.01-0018 007, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002
Weld: 2NC2F-4-1	Drawings: MCM 2201.01-0018 010, MCM 2201.01-0019 001, MCM 2201.01-0010 sh.1, and MCM 2201.01-0010 002

The corresponding ASME figure numbers are listed in Column III (Code Requirement from Which Relief is Requested) of pages 1 and 2 on RR 05-MN-003. In addition, Attachment 6 of the RR 05-MN-003 submittal showed additional information addressing these welds.

2. It was noted in your submittal dated May 12, 2006, that the second 10 year inservice inspection (ISI) interval start date was December 1, 2001 and ends on December 1, 2011. Please confirm that RR 05-MN-003 is for the second 10-year ISI interval as compared to your operating licensee issue date March 3, 1983, which would be the beginning of the first 10-year ISI interval.

Response: RR 05-MN-003 is for the second 10-year ISI interval. The interval dates listed in RR 05-MN-003 are incorrect. The correct dates for the second interval start and end are March 1, 1994 and June 1, 2005, respectively. Note the NRC approved an extension of the second interval to "on or before June 1, 2005" in a letter dated July 20, 2004 in response to RR 03-004. An updated page 1 of 8 in the attachment to Duke's letter dated May 12, 2006 is included as Attachment 2 to this enclosure.

3. It was noted in your submittal dated May 12, 2006 for welds Weld Nos. 2NC2F-1-1, 2NC2F-3-1, and 2NC2F-4-1 were classified as dissimilar metal welds under ASME Code, Section XI Category B-F. In Paragraph D of the May 12, 2006, submittal the material for the Reactor Pressure Vessel pipe-to-safe end weld is referenced as stainless steel. Please clarify material type for Weld Nos. 2NC2F-1-1, 2NC2F-3-1, and 2NC2F-4-1 and the adjacent base metal.

Response: Weld Nos. 2NC2F-1-1, 2NC2F-3-1, and 2NC2F-4-1 are stainless steel welds that attach the stainless loop piping to the stainless safe ends. The loop piping was fabricated from cast stainless steel. The safe-ends were fabricated by depositing stainless steel type 309S butter and stainless steel type 308L weld metal onto the carbon steel nozzle material with subsequent post weld heat treatment.

Note that there are two (2) welds within close proximity to each other at these locations. The stainless welds listed above were conservatively categorized as B-F welds because of their close proximity to the dissimilar metal weld and the carbon steel base material of the nozzle. By categorizing these welds as B-F they receive 100% inspection rather than a 25% sample under category B-J. (Reference original relief request submittal Attachment 6, page 3 of 4 for figures showing the two welds.)

4. For each request number 1 through 8 listed on pages 1 and 2 of RR 05-MN-003 the ASME Code requirement was not stated in the licensee's request for relief as to which ASME Code requirement the licensee was seeking relief. Please state the ASME Code requirement for each number that relief is being requested pursuant to Code of Federal Regulations 50.55a(g)(5)(iii).

Response: ASME Code paragraph IWB-2500(a) requires components to be examined and tested as specified in Table IWB-2500-1. The table identifies a figure number, associated with each examination item number, which provides the required examination volume dimensions. Specifically, Duke seeks relief from obtaining the full volume required by these figures. Please reference the table shown on pages 1 and 2 of RR 05-MN-003 in which the figure numbers for which Duke seeks relief from code requirements is shown in Column III for each weld.

5. For ASME Code, Section XI, Categories and Items numbers where both a volumetric and surface examination is required please provide the coverage obtained for the surface examination.

Response: Listed below are the surface examinations for welds listed under the Relief Request. Surface exams on nozzle welds were performed earlier in the interval with acceptable results.

Weld: 2RPV-W03	No Surface exam required per code
Weld: 2RPV-W01	No Surface exam required per code
Weld: 2RPV-W15-SE	Examined 11/27/1994 100% Surface
Weld: 2RPV-W17-SE	Examined 11/30/1994 100% Surface
Weld: 2RPV-W18-SE	Examined 12/01/1994 100% Surface
Weld: 2NC2F-1-1	Examined 11/27/1994 100% Surface
Weld: 2NC2F-3-1	Examined 11/30/1994 100% Surface
Weld: 2NC2F-4-1	Examined 12/01/1994 100% Surface

Attachment 1

Component Drawings in Response to RAI Question 1

Attachment 2

**Updated Page 1 of 8 in
Response to RAI
Questions 2 and 4**

Proposed Relief in Accordance with 10 CFR 50.55a(g)(5)(iii), Inservice Inspection Impracticality

Duke Energy Corporation

McGuire Nuclear Station – Unit 2 (EOC-16)

Second 10-Year Interval – Inservice Inspection Plan

Interval Start Date= March 1, 1994 Interval End Date= June 1, 2005

ASME Section XI Code – 1989 Edition with No Addenda

Code Case N-460 is applicable

Examination Dates October 6, 2003-April 14, 2005

Request Number	I. Limited Area/Weld I.D. Number	II. System / Component for Which Relief is Requested: Area or Weld to be Examined	III. Code Requirement from Which Relief is Requested: 100% Exam Volume Coverage Exam Category Item No. Fig. No. Limitation Percentage	IV. & V. Impracticality/ Burden Caused by Compliance	VI. Proposed Alternate Examinations or Testing	VII. Implementation Schedule and Duration	VIII. Justification for Granting Relief
1.	2RPV-W03	NC System Reactor Vessel Lower Shell to Lower Head Circumferential Weld	Exam Category B-A Item No. B01.011.003 Fig. IWB-2500-1 72.76% Volume Coverage	See Paragraph "A" See Attachment 1 Pages 1-40 Attachment 6 Page 1	See Paragraph "E"	See Paragraph "F"	See Paragraph "G" See Attachment 1 Pages 1-40 Attachment 6 Page 1
2.	2RPV-W01	NC System Reactor Vessel Lower Head to Bottom Head Circumferential Weld	Exam Category B-A Item No. B01.021.002 Fig. IWB-2500-3 87.19% Volume Coverage	See Paragraph "B" See Attachment 2 Pages 1-81 Attachment 6 Page 2	See Paragraph "E"	See Paragraph "F"	See Paragraph "H" See Attachment 2 Pages 1-81 Attachment 6 Page 2
3.	2RPV-W15-SE	NC System Reactor Vessel Outlet Nozzle to Safe End Weld (22 degrees)	Exam Category B-F Item No. B05.010.005 and B05.010.005A Fig. IWB-2500-8 84.38% Volume Coverage	See Paragraph "C" See Attachment 3 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 3 Pages 1-7 Attachment 6 Page 3
4.	2RPV-W17-SE	NC System Reactor Vessel Outlet Nozzle to Safe End Weld (202 degrees)	Exam Category B-F Item No. B05.010.007 and B05.010.007A Fig. IWB-2500-8 80.24% Volume Coverage	See Paragraph "C" See Attachment 4 Pages 1-7 Attachment 6 Page 3	See Paragraph "E"	See Paragraph "F"	See Paragraph "I" See Attachment 4 Pages 1-7 Attachment 6 Page 3

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“CENTERLINES OF PRESSURE
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REPORTABLE UT
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“WELD: 2NC2F-4-1, 2RPV-W18-SE”**

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